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Towards Accounting Semiology

An Interdisciplinary Re-Conceptualisation of IFRS Asset Recognition and Measurement

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Declaration

This is to certify that the work contained within has been composed by me and is entirely my own work. No part of this thesis has been submitted for any other degree or professional qualification.

Signed:

Shaul Hayoun

Abstract

In the spirit of interdisciplinary critical accounting studies and in light of the IASB's on-going Conceptual Framework project, this thesis problematises and proposes a re-conceptualisation of two fundamental financial accounting practices: recognition and measurement of assets. In order to do so, the thesis steps outside financial accounting's conventional disciplinary resources of economics and finance. It proposes to mobilise Ferdinand de Saussure's semiology, which, defined as a theory of social sign systems, provides a meaningful delineation of financial accounting as a purposeful sign technology. With such a lens and with a research approach of going beyond IASB's proclaimed concepts and narrative to its nuanced prescriptions, the thesis challenges taken-for-granted assumptions with regard to the market-based nature of Fair Value measurement and the characterisation of judgement involved in recognition.

With respect to value measurement, the thesis harnesses semiology to fracture the dichotomy between the market and the entity perspectives, which is generally assumed in extant accounting research and policy-making. It is shown how the IASB's Fair Value measurement prescriptions demonstrate semiology's two-dimensional '*value constellation*', where the asset's value is not merely relational (and not intrinsic) but, importantly, relational in two distinct dimensions. It is a product, first, of differentiation from other values in the market and, second, of interrelation with other values in the specific entity. With a semiological theorisation of the financial statement, market-based and entity-specific perspectives serve as complementary inputs rather than contradictory outputs.

With respect to recognition, the thesis proposes to shift the locus of judgment from questions of recognition thresholds (probability and reliability) to the under-investigated issue of the asset's separability from the firm's general cash flow. It is shown how the IASB's procedures manifest the semiological principle of '*reciprocal articulation*': accounting entities (e.g., 'assets') are not passive representations of pre-existing economic resources, but rather a product of delimiting – carving out – the asset/resource from the broader category (or the entire firm). With such theorisation, the crux of recognition is separability, which is never natural or technical, but rather anchorless and reciprocal. The thesis thereby sheds light on the plasticity of recognition for both tangible and intangible assets.

With its theory-informed analysis the thesis offers a set of conceptual instruments – value constellation and reciprocal articulation – as the logic of the balance sheet as a sign technology: its *semio-logic*. With Saussure's ground-breaking linguistic semiology, it offers a parallel financial-numeric semiology: an *Accounting Semiology*.

Lay Summary

The accounting standards issued by the International Accounting Standards Board (IASB) are now applicable to more than 120 countries around the world, making it the most influential financial accounting policy-making body ever to operate. The recent publication by IASB of its Conceptual Framework Exposure Draft (2015) is therefore an important event in accounting regulation. This thesis uses this event as a trigger to investigate one particular statement – the statement of financial position (the ‘balance sheet’) – and two fundamental accounting practices related to it: the recognition and measurement of assets.

The objective of the thesis is not the study of the Conceptual Framework itself, but rather challenging some of its fundamental assumptions. This is done through an interdisciplinary approach, which allows deviation from such traditional assumptions in accounting research and policy-making. While issues of recognition and measurement in financial statements are usually investigated through the lenses of economics and finance, this thesis explores the use of a different discipline: semiology, the theory of social signs systems that has been most successfully used in linguistics. The thesis makes the argument for its usefulness also in accounting, as a financial-numeric social sign system. In particular, the thesis demonstrates the applicability in financial accounting of two important concepts drawn from semiology – ‘*value constellation*’ and ‘*reciprocal articulation*’ – and shows how these contribute to our understanding of asset measurement and recognition, respectively.

With the notion of value constellation, the thesis shows how, under IASB’s prescriptions, Fair Value measurement is relational in two different

dimensions. It is a product, first, of differentiation from other values in the market and, second, of interrelation with other values in the specific entity. In deviation from previous literature, the thesis shows how market-based and entity-specific perspectives are complementary inputs rather than contradictory outputs.

With the notion of reciprocal articulation, it is further shown how accounting entities (e.g., assets) in the balance sheet ('expression') are not a product of representations of pre-existing economic resources ('content'), but of articulation – or: separability – of the resource/asset from the entity's cash flow as a whole. It is also shown how such separability involves judgment and cannot be pre-determined by technical prescribed criteria (such as physical or legal characteristics), and is therefore at the core of the plasticity of asset recognition.

Together, reciprocal articulation and value constellation offer an alternative framework – or a 'logic' – to the operation of the balance sheet as a social signifying technology. This theorisation has implications to the fundamental issues of recognition and measurement as well as to the broader understanding of the manner in which accounting technologies interact with their social context.

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CHAPTER I: INTRODUCTION

1. Overview and structure

1.1 Overview

The study conducted in this doctorate thesis is located at an uncommon intersection in accounting research: on the one hand, its objects of enquiry are traditional financial accounting principles and techniques; on the other hand, its research approach is interdisciplinary and qualitative. The thesis ventures into critical perspectives of mainstream domains. Specifically, the thesis uses the disciplinary lens of semiology – the theory of social sign systems – in order to challenge taken-for-granted assumptions with respect to two of the most fundamental practices of contemporary financial accounting: recognition and measurement of assets in the statement of financial position. Initiated by the founding father of modern linguistics, Ferdinand de Saussure (1857 – 1913), and advanced by influential social theorists such as Roland Barthes (1915 – 1980), semiology has transformed the theorisation of language statements by introducing the notion of ‘linguistic value’. The thesis will show, that this framework may also serve to illuminate the core assumptions underlying *financial statements* and their ‘*accounting value*’.

Stepping outside the conventional disciplinary resources of financial accounting research, i.e. economics, finance and psychology, in order to broaden the insight into accounting’s assumptions is not merely an intellectual exercise, but one which has policy-oriented dimensions of timely relevance. An analysis and critique of accounting principles from a heterodox lens is

important, especially today, when one standard setter – the International Accounting Standards Board (IASB) – has gained significant global influence, with its International Financial Reporting Standards (IFRS) being used in more than 125 countries around the world.¹ Furthermore, in its Conceptual Framework project, the IASB is currently in the process of undergoing its most significant and fundamental review of the IFRS's conceptual underpinnings, including the core issues of recognition and measurement (IASB, 2015; hereafter the Conceptual Framework Exposure Draft or the *CFED*). With semiology as a theoretical frame, and with a research strategy of going beyond the IASB's proclaimed concepts and narrative to its nuanced practical prescriptions, the thesis offers a re-conceptualisation of asset recognition and measurement. It thereby offers a re-conceptualisation of the statement of financial position, which has been recently described as “one of the most powerful institutions of our time” (Miller and Power, 2013, p. 584).

The thesis engages with, and contributes to, two interrelated levels of academic debate. On the general level, it introduces a disciplinary lens, semiology, which is shown to be of relevance to the study of financial accounting as a distinct social phenomenon: as a social sign technology. In terms of its scope of applicability and characteristics, it will be shown how semiology provides a meaningful delineation to financial accounting, but in a manner that is open, critical and not de-contextualised from accounting's social and organisational settings (Gallhofer *et al.*, 2015; Quattrone, 2000). This is done with respect to accounting principles and techniques as prescribed by the standard setter, as distinct from the more frequently discussed sociological or behavioural aspects of those applying them, i.e., standard users. Put

¹ IFRS website, accessed July 7, 2017: <http://www.ifrs.org/about-us/>.

differently, in its general level the thesis responds to Mary Barth's recent call (2015) to embrace disciplinary fields beyond economics, finance and psychology in the study of "the content and characteristics of the information being communicated" in financial accounting: "Broader and new perspectives can rejuvenate a field and enrich it" (p. 504). Semiology, it will be shown, is one such productive 'broader and new perspective'.

On a more specific level, the thesis constructs and mobilises from semiology a set of conceptual instruments (Robson, 1991) in order to engage with, deviate from and contribute to academic debates of two consequential issues: asset measurement and asset recognition. With a theory-informed analysis of the standard-setter's own prescriptions for value measurement, the thesis fractures the fundamental dichotomy between the market and the entity perspectives, which is generally assumed in extant accounting research and policy-making. It is shown how, as in semiology's principle which may be best captured under the term '*value constellation*', the asset's value is relational (and not intrinsic) – it is merely a product of other values. Importantly, it is relational in two distinct dimensions: it is a product, first, of differentiation from other values in the market and, second, of interrelation with other values in the specific entity. With a semiological theorisation of the financial statement, market-based and entity-specific perspectives serve as complementary inputs rather than contradictory outputs as commonly assumed.

With a similar theory-informed approach in the analysis of asset recognition practices prescribed by the IASB, the thesis shows how the locus of judgment in recognition is not in questions of thresholds (probability and reliability) but rather in the under-investigated and usually marginalised issue of the asset's

separability from the firm as a whole. It is shown how the IASB's procedures manifest a semiological principle that this thesis terms '*reciprocal articulation*', which serves as a conceptual alternative to the notion of representation that has been shown for many years to be insufficient in accounting as in other domains. With reciprocal articulation, accounting entities (e.g., 'assets') are not passive representations of pre-existing economic resources, but rather a product of delimiting the asset/resource from the broader category (from the firm as a whole, from its entire cash flow, from its general goodwill). With such theorisation, the crux of recognition is separability, which is never natural or technical, but rather reciprocal and lacking substantive anchors. The thesis thereby explicates the indeterminacy of recognised assets and the pliability and plasticity of their tentative boundaries – even for those assets with seemingly the least plastic boundaries, as real estate and other tangible assets.

However, the thesis' end point is not in these specific issues. With the hindsight of the surprising findings relating to the above issues, the thesis goes back to the more general level of engagement. The concepts of value constellation and reciprocal articulation, combined, highlight an aspect in Saussure's linguistic and philosophical revolution, which is not always fully appreciated but which is crucial for accounting theorisation: with semiology, Saussure has de-substantiated language as a social sign system (e.g., Joubert, 2006). As he writes in his notes:

Since language does not in any of its manifestations present a substance, but rather combined or isolated *actions* of physiological, physical, or mental forces, and since all our distinctions, all our terminology, all the ways we express ourselves are modelled on this involuntary supposition of a substance, it must be accepted that the most essential task of a theory of language will be to unravel the initial distinctions (Saussure, 2006, p. 136).

Semiology's success has been in bypassing the impasse of substantive, ideal and allegedly pre-determined 'meaning' through a pragmatic, relational and dynamic notion of 'value' (Barthes, 1994, p. 154). This negative, substance-less, characterisation of the linguistic value is "what is distinctively Saussurean" (Joseph, 2016, p. 198). It has been transformative in the language science and may also be of significant importance for contemporary accounting and accounting research. With semiology, the thesis ultimately proposes a non-substantive logic (Quattrone, 2015a) – one that is built not on predetermined knowledge categories but rather on knowledge-production procedures – to an important financial accounting technology: the balance sheet.² With the ground-breaking linguistic semiology, it offers a parallel financial-numeric semiology: an *Accounting Semiology*.

1.2. Structure

This thesis is structured in a 'paper portfolio format', with three papers at its core, preceded by this *Introduction* chapter and followed by a *Conclusions* chapter. Section 2 of the *Introduction* chapter is focused on the contexts and motivations to the current research. In particular, the section depicts the relative disengagement from contemporary financial accounting principles and techniques (such as those of recognition and measurement) by the two leading accounting schools: the capital market based research strand and, more relevant for the purpose of this thesis, the critical interdisciplinary accounting school. With this background as to the accounting research context, section 3 of this chapter introduces semiology as a framework that allows applying a critical approach in the study of such financial accounting issues.

² The terms 'statement of financial position' and 'balance sheet' are used in this thesis interchangeably.

It makes the argument for semiology's distinct fit and potential usefulness in the investigation of under-explored dimensions of financial accounting.

From the general context of accounting research and the general introduction of semiology and its relevance to accounting, the thesis proceeds to three specific issues discussed in three separate papers. The first paper is titled **"How Fair Value is both Market-Based and Entity-Specific: The Irreducibility of Value Constellations to Market Prices"** (hereafter *Paper 1*). It addresses issues of asset measurement through semiology's principle of value constellation. The second paper is titled **"From Representation to Articulation: Relocating the Judgement of Recognition within Asset Separability"** (hereafter *Paper 2*). It engages the question of asset recognition through semiology's notion of reciprocal articulation. The third paper is titled **"The Semio-Logic of Financial Accounting: The Non-Essence Underlying the IFRS Balance Sheet"** (hereafter *Paper 3*). It is a conceptual paper that engages with the debate on the non-essence of accounting, and offers more generally a semiological theorisation to the statement of financial position. A brief presentation of the *Papers* is provided in section 4 of this *Introduction*.

Following the three papers, the last chapter provides the conclusions of this thesis and a broader account of its contributions (broader than the contributions explicitly addressed in the core *Papers*). The *Conclusions* chapter also discusses the thesis' limitations, potential for further research and relevance for practice.

In light of the portfolio format of this thesis, it is worthwhile clarifying the manner in which extant literature has been engaged with. The accounting literature referred to in the *Introduction* chapter (in section 2) is generally used

to illustrate the focus of current interdisciplinary research and its (rather loose) relation to financial accounting principles and techniques. This *Introduction* chapter also refers (in section 3) to previous studies that have (briefly and sporadically) applied semiology in the context of financial accounting. On a different level, the accounting literature relevant to each of the specific issues – measurement, recognition and the non-essence of accounting – is discussed in the reviews of each of the *Papers*.

A second clarification relates to the research strategy employed in this thesis. As shall be discussed further on, a critical engagement with the assumptions underlying contemporary financial accounting practices would benefit not only from a new theoretical lens, but also from a research strategy which is different from the prevailing ones: the research approach must take the products of the standard setters seriously. ‘Taking them seriously’ in this context means a close engagement with the nuanced technicalities prescribed by the standard setter – with the nuts and bolts of the accounting infrastructure (Vargha, 2016) – but one that does not take for granted the narrative and declarations of the standard setter with respect to such prescriptions. The discussion of such a research strategy is introduced in section 2.5 of this *Introduction* chapter, and further elaborated in the research design sections of *Papers 1* and *2*.

One last structural consequence of the portfolio format is the unavoidable repetition. As each of the three *Papers* has been designed as a stand-alone academic publication, common underlying themes – especially with respect to the semiological framework – are necessarily repeated, though with different emphases depending on the particular issue discussed in each *Paper*. In any case, notwithstanding the common theoretical framework, each *Paper* has its

own distinct accounting issues that it engages with, with separate accounting literatures, findings and contributions.

2. Contexts and motivations

2.1. Introduction: financial accounting at the margins

The launch of *Accounting, Organizations and Society* (AOS) in 1976 signalled the birth, at least institutionally, of what turned out to be one of the most prolific research schools in accounting academia, which may be titled as ‘critical accounting studies’. The term is amorphous and elusive, but it may at least capture the fundamental necessity of reflection on consequential issues that are frequently being black-boxed (e.g., Ahrens *et al.*, 2008; Parker, 2008). While the mainstream approach to accounting views it as a technical tool for representing economic phenomena, aiming at achieving neutrality, transparency and comprehensive visibility of economic events, the critical strand calls for the visibility of, and reflection on, accounting phenomena themselves, their origins and consequences (e.g., Tinker, 1991). The latter’s strategy is that of “turning our gaze inwards and encourage critical reflexivity” (Chapman *et al.*, 2009, p. 21). Critical research is oriented to making accounting and its implications visible rather than transparent. In such a task, other disciplines play a significant role. Not only because accounting is a relatively young academic discipline, and not only because accounting’s development is practice-based and driven mostly by well-organised professional communities which are generally distanced from theoretical perspectives. It is so, also because reflection requires broader theoretical frameworks and diversity of lenses (e.g., Quattrone, 2000).

The lenses of sociology and social studies more broadly have dominated the critical research strand and have contributed significantly to the understanding of accounting's development and consequences. Commemorating the 40th anniversary of AOS, Walker (2016) emphasises that there is much more to explore in the intersection of accounting and the social, but nevertheless there is no doubt in the significant fruits that have already been gained in the social studies of accounting. He begins his paper with the achievements of such disciplinary intersection:

One of the undeniable achievements of AOS has been its affirmation of the social in accounting. The journal has consistently declared its commitment to exploring the social dimensions of the discipline and to encouraging new thinking, research and action on accounting and society. Various features of the social have endured among the aims and scope of AOS. Investigations have been encouraged into the relationships between accounting theory, practice and social values; accounting and the social environment of the organisation; the social role of accounting; social accounting and social audit; and, the social aspects of standard setting (Walker, 2016, p. 41).

However, one realm of accounting that has yet to benefit from the fruits of critical and interdisciplinary perspectives is that of financial accounting principles and practices. As recent qualitative and quantitative reviews continue to show, the core concepts of financial accounting such as recognition and measurement have not been of significant interest to the predominant accounting schools in the last four decades. In his recent review of accounting measurement over the last half a century, Whittington reminds his readers of the

fundamental shift in the focus of accounting research whereby much less attention is given to the technology of accounting (how it is done) and much more to the context of accounting (why it is done and what are its consequences) (Whittington, 2015a, p. 550).

The recent bibliographic survey by Brown and Jones (2015) provides quantitative empirical support for Whittington's overview. Only 3.3% of the articles published in 11 highly ranked accounting journals in the years 2002-2007 (76 out of 2,251) have had a conceptual framework or financial accounting principles as their content (tables 2 and 4). This relative neglect of financial accounting issues has been a characteristic of both the positive accounting strand and the critical-interdisciplinary one. As Whittington explains:

Although these two research programs use different methodologies, they both emphasize the context of accounting rather than its techniques, thus drawing attention away from analysis of the properties of alternative measurement methods. Thus, as practitioners and standard setters continued to debate measurement, academic research had little new to offer in the way of technical analysis: the 'Golden Age' was over (Whittington, 2015a, p. 557).

The concerns emerging from this fundamental academic shift were referred to by Hopwood (2007) in his address to the annual meeting of the American Accounting Association:

Of course, the danger is that such research developments have produced two types of accounting researchers who tend not to communicate with one another. On the one hand, we have those who can research the consequences of accounting, be it with a capital market or behavioral emphasis. Such researchers currently represent the mainstream of accounting research. On the other hand, however, are those who have a thorough understanding of accounting itself and can reflect on its internal logics and the possibilities for these to change. Such researchers tended to be more in vogue from the 1930s until the period in the 1960s that witnessed the intellectual developments we have just discussed. In an ideal world, researchers having such obviously complementary interests and skills would communicate and collaborate, but that has very rarely happened (Hopwood, 2007, p. 1368).

To paraphrase the words of Miller (1998): the ‘margins of accounting’ today, at least as far as academic research is concerned, are the principles and assumptions underlying the conventional financial accounting technologies, such as the statement of financial position and the income statement. The following sub-sections provide further context of such marginalisation, and the motivation to take part in revisiting these consequential aspects of accounting from a critical, reflexive, interdisciplinary perspective.

2.2. From normative to positive accounting: Ball and Brown (1968, 2014)

One of the studies that marks the end of the ‘Golden Age’ of conceptual or ‘normative’ accounting research is the study by Ball and Brown (1968) on the empirical correspondence between accounting figures (income) and share prices. Originally rejected from the *Accounting Review* for the reason that it “had little to do with accounting” (Ball and Brown, 2014, p. 17), it has become “among the most influential research papers published in accounting during the last century” (*ibid*, p. 1), as the authors rightfully argue 45 years later in a retrospective paper invited by the same *Accounting Review*. The retrospective paper is enlightening for the purpose of this section and this thesis, as it captures the titanic shift that had left the predominant accounting schools with little interest in investigating the concepts underlying the financial accounting technologies *per se*, and with almost an exclusive focus on the consequences of such technologies.³

³ The phrase ‘accounting technology’ is not used in this thesis to refer to accounting IT (computerised) infrastructures but rather, on a more conceptual level, to structurally designed calculative technologies (Miller and Napier, 1993): tools, devices and methods, such as the balance sheet in financial accounting or the balanced scorecard in management accounting. This approach is in line, for example,

The contributions of Ball and Brown (1968) to accounting research have been extensive, introducing market-based positive accounting research. However, their retrospective paper (2014) highlights the fact that the original paper was also a *normative* essay. Ball and Brown (1968) made the argument of how accounting scholars *should* conduct their research, in clear distinction from how accounting research was actually being conducted at that time. In its introduction, Ball and Brown (1968) depicted the question of meaning and utility of accounting figures that occupied the then-prevailing approach (the ‘normative’ tradition). The leading scholars of the time had been occupied with the fundamental question of mixed measurement (or the additivity conundrum): “net income is an aggregate of components which are not homogeneous. It is thus alleged to be a ‘meaningless’ figure, not unlike the difference between twenty-seven tables and eight chairs” (Ball and Brown, 1968, p. 160). Based on this proposition, accounting scholars such as Paton and Littleton, Edwards and Bell, Chambers and Ijiri (all mentioned in Ball and Brown 1968, p. 159), had engaged in proposing better accounting schemes. However, the empirical findings of Ball and Brown (1968) demonstrated that share prices correlated (though not in a timely manner) with accounting income numbers and the latter were therefore deemed useful for investors after all. The normative approach’s main assumption – about the meaninglessness of accounting aggregates – had seemingly collapsed.

In their retrospective paper (2014) Ball and Brown are explicit in drawing the normative conclusion from their original empirical findings: the need to

with Whittington’s (2015a) use of the term as quoted earlier: “the technology of accounting (how it is done)” (see similarly, e.g., in Mennicken and Millo, 2017).

abandon conceptual accounting debates altogether (see, e.g., in pp. 3-8, 15-16, 21-22). For example:

We believed we reported evidence contradicting the proposition, asserted regularly in the literature since Canning (1929), that accounting income is devoid of meaning because it is not founded on a homogeneous set of principles, rules and methods. Furthermore, there were wider implications, since this novel result brought into question the whole way of thinking on which that proposition and the proposed alternative accounting schemes were based (Ball and Brown, 2014, p. 21).

And:

While our research was conducted in the spirit of positive economics, as noted above we viewed it as having distinct normative implications. Recall that the prior literature contained propositions about 'what is' (such as the thesis that earnings are meaningless) as well as 'what ought to be'. In rejecting the 'what is' proposition, we believed we brought into question the 'what ought to be' propositions emanating from the same way of thinking (*ibid*, p. 22).

In retrospect, the call to abandon conceptual research was successful: "Apparently this evidence [the share price – income correlation] was sufficiently anomalous for that world view to cause many of the next generation of accounting scholars to abandon that way of thinking" (Ball and Brown, 2014, p. 16). Indeed, the original paper – as read through the lens of the retrospective paper – was a unique normative thesis, one that allegedly demonstrated the futility of normative research.

Importantly, Ball and Brown did not propose an analytical argument to refute the additivity problem. The original paper does not explicate the (assumed) flaw(s) in the argument endorsed by their contemporaries and predecessors. Furthermore, Ball and Brown do not even acknowledge the lack of an

analytical component in the argument. The authors are not required to settle the empirical evidence with the analytical reasoning, because, for them, accounting scholars should not engage with analytical issues. For them, there is no need to identify the exact flaw(s) in the non-additivity argument. Such an approach is even more striking in retrospect of 45 years. They have still not addressed the empirical-analytical puzzle, or even acknowledged the existence of one. Their original paper has indeed been exceptionally innovative: they not only proved the net income–share price correlation, but also allegedly demonstrated the redundancy of engaging in analytical discussions.

The shift from conceptual debates of accounting principles to empirical investigation of accounting's consequences in financial markets has been signalled by Ball and Brown (1968), but had a broader background. Multiple historical circumstances combined to generate this fundamental shift in the focus of accounting research, as discussed in various reviews (e.g., Rutherford, 2010; Kaplan, 2011; Miller and Power, 2013; Barth, 2015). However, what is of specific interest for this thesis, is the fact that this shift

was given theoretical support by the emergence of the 'informational perspective' (Beaver and Demski, 1979), which demonstrated that, in a realistic economic environment, characterized by imperfect and incomplete markets, income and similar ideal economic summary measures are ill-defined, so that the role of the accountant is limited to providing useful information, rather than the ideal global measures sought by traditional deductive theorists, whose approach was described as 'measurement prescriptive' (Whittington, 2015a, p. 557).

Facing incompleteness and imperfection in accounting's realistic contexts, ideal conceptual debates, where each proposal is based on a different assumption, are conceived as fruitless.

The research strategy proposed by Ball and Brown (1968) as by Beaver and Demski (1979) – their ‘accounting revolution’ (Beaver, 1981) – has proven to be a successful one. As the recent reviews mentioned above indicate, the interest in the concepts underlying financial accounting methods and technologies has been, and still is, marginal when compared to the vast research on the consequences of accounting data in financial markets.

2.3. The focus of critical accounting studies and financial accounting

A relative lack of interest in financial accounting principles and techniques has been a feature not only of the American-led positive research school; it has also characterised the critical and interdisciplinary accounting tradition led by scholars from across the Atlantic. Here, as well, the impacts on and of accounting – its interaction with its environment – have been conceived to be of more importance than the accounting technologies themselves. The crucial difference between these two schools is that the ‘environment’ in critical accounting studies⁴ is the social, organisational and institutional, while in the positive accounting school the ‘environment’ is mainly the sphere of financial markets.

In his keynote address at the Interdisciplinary Perspectives of Accounting conference, Stephen Woolgar (2015, *ad vocem*) argued that critical accounting

⁴ The term ‘critical accounting studies/research’ is used in this thesis in its broad sense, to include all non-mainstream accounting strands. These have been using different titles and sometimes have had different specific focus. These strands/titles include ‘interpretive accounting research’ (e.g., Ahrens *et al.* 2008), ‘alternative accounting research’ (e.g., Baxter and Chua, 2003), ‘social studies of accounting’ (e.g., Mennicken and Miller, 2012), and ‘interdisciplinary accounting studies’. Importantly, the use of the phrase “critical” is broader than (though includes) the Marxist oriented critical theory perspective which has been specifically focused on underlying ideological social conflicts, as in Chua’s (1986) classical categorisation of accounting research.

studies have been engaged more with social phenomena outside of, and relating to, accounting, such as the political environment within which accounting is operated, than with the accounting technologies *per se*. Quattrone highlights a similar concern:

These accounts have often been qualified as the 'sociology *of* accounting', as the 'politics *of* accounting', as the "history *of* accounting", or, more broadly, as 'interdisciplinary perspectives *on* accounting'...In these various attempts, the use of the prepositions '*of*' and '*on*' denotes that the theoretical development which has shed new light on accounting and finance practices happened somewhere else (in sociology, in politics, in history, or in science and technology studies) (Quattrone, 2015b, p. 50).

It seems that Woolgar and Quattrone's concerns are of special relevance in the context of financial accounting as distinct from management accounting. Napier (2006), with a bird's eye perspective of a review paper, notes that a "movement such as the new accounting history that emphasises the social, organizational and behavioural has in the past tended not to have much to say about financial reporting or fundamental notions of accounting theory" (p. 466). Mennicken and Millo (2017) have likewise pointed to the insufficient attention given to financial accounting technologies themselves, when compared to the research on the socio-historical context of financial accounting. Similarly, Vargha (2016) has recently called for more engagement with "the more intimate workings of accounting":

As sociologists, we often gloss over the technical details of cases in search of the social, which is presumed to lie behind the substance of expertise – it is not the actual numbers that count. Spending time on the nuts and bolts becomes necessary, however, if we want to understand how the accounting infrastructure...brings the economy into being (Vargha, 2016, p. 2).

These observations about the limited attention given to financial accounting technologies and their underlying concepts in critical accounting studies are also supported in the bibliographic survey of Brown and Jones (2015). Only 5.7% of the articles (35 out of 612 in total) published (2002-2007) in three highly ranked journals that are oriented towards critical accounting studies, have had accounting principles, regulation, standards or concepts as their content.⁵ The extensive use in these three interdisciplinary accounting journals of theories from the “Traditional Human Sciences” (*ibid*, table 5) has been more significantly manifested in other – less traditional – domains of accounting, and especially in the sphere of “accounting and the social and political environment” (*ibid*, table 4).

More generally, as recently acknowledged in an AOS editorial note (Robson *et al.*, 2017), the objects of enquiry of the critical research community have been mostly in the domain of management accounting and control, and not financial reporting. Exceptions of social and organisational research into financial accounting issues exist, but “this work has been carved out by individuals working largely against the scholarly tide of the time” (p. 36). This tendency is also shown in previous review articles in AOS (e.g., Baxter and Chua, 2003; Napier, 2006). It is no wonder, therefore, that “qualitative study of financial accounting practices” is still, more than 40 years after the first issue of AOS, “rare in the literature” (Huikku *et al.*, 2017, p. 79).⁶

⁵ In *Accounting, Organizations and Society* (AOS) – 4.3%; in *Critical Perspectives on Accounting* (CPA) – 6.5%; and in *Accounting, Auditing and Accountability Journal* (AAAJ) – 6%.

⁶ In a recent collection of *financial* accounting theory (Jones, 2015), the chapter devoted to “social theorisation” is actually engaged with studies that “are largely on management accounting, but the theories elucidated are relevant to financial accounting” (Hopper *et al.*, 2015, p. 454). While this may be merely an anecdote, it

The difference in the relative roles that financial accounting and management accounting play in critical research goes hand-in-hand with the community's focus on the social realms that surround accounting. Management accounting – being voluntary, flexible and engaging rather than regulated and formal – is more suitable to such enquiry into specific social contexts. Its boundaries are not only broader, but also much more amorphous, when compared to mandatory financial reporting. As Robson *et al.* (2017) argue, the focus in AOS on management accounting and control relates to the fact that these issues have been “particularly receptive to a range of social and organizational theories” (p. 35).

The interdisciplinarity of critical accounting research has been its engine but also its compass; not only providing new methods, but also charting – and focusing on – new domains of accounting, away from its traditional ones. Indeed, “Scholars have expanded their view of what counts as accounting” (Robson *et al.*, 2017, p. 35), and in particular into the realm of the social aspects of accounting (Walker, 2016). Power (2012) explains that “the accounting field can be said to encompass many of the processes and problems that deeply interest sociology scholars...This view places the analysis of accounting within the heartland of sociological interest” (p. 294). Mennicken and Miller (2012) also address the “disciplinary boundaries” within which the social studies of accounting take place: “Somewhat ironically, the rediscovery of accounting as an object of critical and social scientific enquiry has occurred largely outside the disciplinary boundaries of sociology, and more particularly within the discipline of accounting itself” (pp. 4-5).

nevertheless illustrates the scarcity of critical accounting studies that engage with financial accounting issues.

With such an orientation of interdisciplinary accounting research – when its focus is on the sociology of accounting’s drivers and consequences – the distinct problematics of traditional ‘technical’ issues, such as recognition and measurement, are not at the community’s core interests. As Chapman *et al.* (2009) observe, with the revival of the research into its institutional and organisational aspects, “Accounting has finally... arrived *back* on the social science agenda” (p. 3), but at the same time it has also “lost some of its apparent uniqueness” (p. 13).

2.4. Consequences of disengagement from financial accounting

The current research focus of the critical accounting community on the organisational and institutional drivers and consequences of accounting has proven to be enriching and productive. However, such a focus has also played a role in the community's distance from important accounting constituencies. As the research outputs of social studies of accounting are rarely engaging with specific financial accounting standards, concepts and methods, they play no significant role in the work of financial accounting policy-makers and reporting practitioners, i.e., in the work of standard setters and standard users. This is not to say that critical accounting research is not engaged with various aspects of the practice of accounting. Issues such as accounting professionalism and accounting’s engagement with organisational behaviour and strategy (e.g., Chua, 2007) are widely debated. But there is less of an interest in the practical perspectives relating to the reporting regime itself. A derivative of this is the limited impact on accounting education, especially at the undergraduate level. Textbooks, teaching programmes and reading lists aimed to prepare students to become accounting practitioners are focused on, or at least provide significant room for, a discussion of accounting standards

and their application. Overall, critical accounting scholars on the one hand, and financial accounting policy-makers, reporting practitioners and undergraduate teachers on the other hand, do not share the primary objects of enquiry.

The argument against detachment in critical accounting research is not new. For example, the discussions in the special issue of *Critical Perspectives on Accounting* (CPA) on the future of interpretive research (volume 19 (2008), issue 6) highlighted the need for more relevant research, that goes beyond academia and reaches the realms of practice, policy-making and management education. In their editorial essay introducing another CPA special issue, Carter and Toms (2010) conclude with a call for “making critical accounting matter” (p. 179). Otherwise, we are led “to the ossification of the discipline, which, at best, means that a small number of the same people meeting up at the same conferences, discussing the same points *ad infinitum*! Arguments would be utterly predictable and irrelevant to all but those taking part” (p. 179). Five years later, in an editorial essay introducing yet another CPA special issue, Chabrak and Gendron (2015) make a similar argument: the community must produce “research that matters” (p. 4) beyond the narrow specialized academic audience. This would be enhanced by innovative knowledge to be found in “peripheral journals”.

There could be no dispute that innovative knowledge is necessary for the production of ‘research that matters’, and critical research, by definition, cannot fully share the assumptions, methodologies and perspectives of practice, policy-making or mainstream research. However, it can share – at least partially – its objects of enquiry. Otherwise, what would be the impact of the critique? Accounting practitioners and standard setters may benefit from

unfamiliar spectacles, but only so long as they are directed to the same – or roughly the same – objects of enquiry, in which contemporary financial accounting principles take a significant role. Currently, as Rutherford (2010) emphasises, financial accounting as a system of recognition, measurement and disclosure principles is rarely the object of enquiry for critical accounting scholars (which in this regard is no different from the capital-market based accounting research; see, e.g., Kaplan, 2011). So long as this distance is maintained, critical research does not provide stimulation or incentive for market oriented practice, teaching and policy-making to add broader and more reflective perspectives to their economics-focused approach. Rutherford further argues, that “politically sophisticated practitioners are particularly comfortable about academic accountants pursuing post-classical research precisely because it does not present policy-relevant findings to those, such as regulators, who might be inclined to use them” (2010, p. 164).

The concept of ‘value’ is an important illustration for the above point. Critical accounting studies have expanded the territory of ‘value’, to include not only financial value, but also other dimensions such as social, environmental, and ethical values (see, e.g., Gray, 2002; Hall *et al.*, 2015). The spectrum of interests and stakeholders that accounting must engage with has been significantly expanded. The understanding of ‘what counts as accounting’ has been broadened (Napier, 2006; Robson *et al.*, 2017). However, the concept of financial value in the narrower realm of financial accounting is also in need of broader reflection. Even under the restrictive perspective of the current regulatory regime – with its focus on investment decisions – ‘value’ would benefit from interdisciplinary critique. The interest in broadening the debate to different orders of values is not mutually exclusive with the interest to deepen the understanding and critique of the issue of financial value – as one

such order: not an exclusive, but an important and consequential order. Otherwise, as Rutherford (2010) argued, practitioners and policy-makers of financial reporting are left unchallenged. Expanding the boundaries of accounting is therefore one avenue of critique; rethinking the fundamental assumptions at its core could be another complementary avenue. The latter avenue, which is currently under-researched, is the one taken in this thesis.

2.5. Implications for methodology: taking the standard-setter's perspective seriously and cautiously

Different orders of critique may require different perspectives of analysis. If, for example, the expansion of values, interests and stakeholders may be viewed as a critique from outside the dominant regulatory perspective, the issue of financial accounting value requires a critical assessment 'from within'. It requires a detailed engagement with – rather than idealist disengagement from – the standard-setter's outputs. These are often very detailed and seemingly technical. They also employ the vocabulary of economics and finance, which are precisely the lenses that a critical approach aims to challenge. However, such 'technical' aspects are sometimes very consequential. The financial crisis of 2008-9, and the debate about the role of fair value measurement and impairment requirements by IASB and its American counterpart FASB, have "energised enquiry about financial accounting" (Robson *et al.*, 2017, p. 36). These events and debates serve as a reminder of the importance and 'real life' effects of standard-setters' detailed prescriptions. As Zambon and Zan (2010, p. 800) argue, "Accounting technology relies in fact on conceptual premises which are rarely spelt out". Given the global applicability of IFRS, the consequences of the standard-setter's perspective are of significance today more than ever.

Not only have we recently entered into an unprecedented period where the majority of the world's countries are under the regime of one standard setter, namely the IASB, this standard setter is also currently in the process of revisiting its conceptual underpinning. The Conceptual Framework Exposure Draft aims to produce a comprehensive and coherent body of financial reporting principles, which would also include, for the first time, a systematic conceptualisation of the issue of measurement (which is addressed in the current framework merely by listing the existing measurement bases). The importance of the *CFED* has been stressed by practitioners: in a recent public consultation process taken by IASB, the Conceptual Framework has been identified as a priority project (*CFED*, p. 6). Academics that have been involved in policy-making have also recently emphasised the importance of conceptualisation in standard-setting. Barker (2015) has argued that conceptualising accounting practices can provide deeper understanding and rationale, inform policy debate, and provide meaningful guidance for the practising community. Barth similarly stressed "the need for concepts", especially for measurement practices (Barth, 2014), and Whittington (2015b) described the (then anticipated) *CFED* as "so important" (p. 231) with reference to the conceptualisation of measurement. Power (1993) has taken a more cautious and less demanding approach to the role of conceptual frameworks, but nevertheless acknowledged that such frameworks can play a significant role within the broader dynamic realm of financial accounting concepts and practices, for example in setting boundaries for particular judgments to take place.

However, from a critical perspective the *CFED* is important not only for what it states, but also for what it omits to state. Flushing out the implicit concepts underlying the actual procedures prescribed by the standard setter (Barker

and McGeachin, 2015) is perceived here as more important than annotating the formal official version. A critique relating to financial accounting principles such as recognition and measurement requires therefore taking the standard-setter's perspective seriously by engaging with the corpus it produces. At the same time it must also be suspicious: it must look beyond the formal concepts proclaimed by the standard setter and assess the nuanced practices that it actually demands from preparers. A pragmatic critique requires a "move from, on the one hand, the IASB's rationalization of what it asserts it should be trying to do to, on the other hand, what the IASB is actually doing" (Barker and McGeachin, 2015, pp. 83-4).

Furthermore, as the volume and detail of standards and ancillary guidance increase, they become more significant in the overall process of producing financial statements. With such increase in size and detail, the standard-setter's prescriptions also become a richer object of academic research. While far from being the end point of producing and using financial reports (Cooper and Robson, 2006; Robson and Young, 2009; Robson *et al.*, 2017; Huikku *et al.*, 2017), the prescriptions of standard setter have important consequences of their own, which have been under-investigated (Barker and McGeachin, 2015). In fact, the tendency to focus on the contrast between the perspective of the standard setter and that of the standard users (e.g., preparers, auditors, investors and analysts) has had sometimes the side-effect of portraying a simplified version of the former perspective (e.g., Georgiou, 2017; and see the discussion of this thesis' methodological contribution in section 2.4 of the *Conclusions* chapter). The standard-setter's prescriptions comprise therefore only one dimension – but important and relatively neglected dimension – in a multi-faceted phenomenon.

Embracing such a perspective has consequences in terms of the research methodology. Interviews with those involved in the standard-setting process may shed light on what is asserted by such individuals personally or on behalf of the standard-setting organisation they serve in – but this is not necessarily the same as what such standard setter actually produces. Similarly, as the object of enquiry is the product of standard-setting (see e.g. Young and Williams, 2010), rather than its process (e.g., Robson and Young, 2009), the due-process documentation is of less relevance. It is the actual prescriptions of the standard setter that must be investigated in order to go beyond its narrative and processual gestures. The various publications that the IASB issues for the use of preparers (and, indirectly, auditors) of financial statements, which include standards and additional guidance such as bases for conclusion, application guidance and illustrative examples, must therefore be the anchor of a critique, which is pragmatic but not naïve, of the IASB's recognition and measurement principles (see Barker and McGeachin, 2015). In the categorisation of Brown and Jones (2015, p. 243), this thesis uses 'discursive reasoning' in providing such critique of the standard-setter's perspective, based on qualitative documentary content analysis. However, in contrast to intra-accounting studies, such as Barker and McGeachin (2015), the thesis uses an extra-accounting conceptual lens (Bougen and Young, 2012) in the spirit of interdisciplinary studies. This is the research strategy mobilised in the thesis, as it is further elaborated in the research design sections of *Papers 1* and *2*.

2.6. Conclusions: aiming at critical perspectives in traditional domains

Miller's seminal call (1998) for a research strategy exploring 'the margins of accounting' has been proven to be most productive and continues to be an inspiration for new avenues in accounting research (Mennicken and Sjögren,

2015). This thesis aims to leverage such a strategy in the study of what is conceived as mainstream accounting domains. Contemporary Western financial accounting principles – those that are ‘at the centre’ – might benefit from such an approach, which is critical, reflexive and open to disciplinary intersections. The challenge that this thesis embraces is to conduct a critical study not by broadening the objects of investigations, but by broadening the disciplinary lenses used in the study of the same objects of interest as those of IASB and its users. To use the terminology of Lukka and Vinnari (2014): the objective here is to offer a critical method theory that is applicable to a mainstream domain.

This is a timely challenge, as recognised by scholars from the critical end of the research spectrum (see Robson *et al.*, 2017 representing the AOS encouragement of an emerging FRASOP⁷ community) and, more surprisingly, also by those at its traditional end. In a programmatic paper on financial accounting research, practice and financial accountability, Barth (2015) notes the “clear benefits of accounting research embracing individuals from different fields [different from economics, finance and psychology referred to earlier in the paragraph] with relevant, complementary expertise and knowledge” (p. 504). This is an important call, as economics has served as “the original source discipline” (Brown and Jones, 2015, p. 249) for most research relating to financial accounting concepts and policy-making. Indeed, the use of various disciplinary lenses is not new in critical accounting studies; what is more unusual is an interdisciplinary investigation of the core traditional issues of financial accounting, such as recognition and measurement, and this is precisely what Barth is aiming at: “However, these [previously referred to]

⁷ 'Financial Reporting and Auditing as Social and Organizational Practice'.

studies focus on characteristics of how accounting information is communicated rather than on the content and characteristics of the information being communicated. The impact of the former on financial accounting and accountability is yet to be established, whereas the latter traditionally is the focus of financial accounting research” (2015, p. 504).

This brings us back to the implications of Hopwood’s (2007) call, quoted in section 2.1 above. It surfaces the need to challenge not only the traditional research school with its focus on “accounting itself” and its “internal logics”, but also the critical and behavioural one with its focus on “the consequences of accounting” (p. 1368). The former needs to be challenged for its typical disciplinary lenses (economics and finance), and the latter for its typical domains of interest (and of non-interest).

In this sense, the thesis reaches back even further – to Hines’ seminal paper (1988). Her Socratic dialogue is well known for its theoretical innovation, but it is just as much a critique of accounting research, for its insufficient challenging of practitioners’ assumptions:

'Well, it is not us [accountants], that they call the handmaidens of the status quo. We just do our job. It is the people who make up theories about us. They do not really question what we do...Still, it suits us.'

'Why?'

'It keeps them busy. They don't interfere. Where would we be if the whole thing was unmasked?... Still, we could do with a bit of help at present... (Hines, 1988, p. 256).

Hines' concern in the quote above is not with accountants, but with accounting scholarship, which is detached from the principles underlying the accounting

practices. As discussed above, Ball and Brown (1968) is the watershed that marks precisely this detachment. However, 45 years later, the Chicago School founders of market-based accounting research reveal, even if very briefly and only at the margins, one single conceptual (rather than empirical) anchor. Such an anchor was not in economics or finance, and not even in the behavioural sciences: it was rather in a theory of signs, with an explicit analogy between words and accounting numbers (Ball and Brown, 2014, p. 9, footnote 9).⁸ Indeed, investigating accounting within a broader discipline of signs is almost intuitive, but at the same time underexplored. This thesis makes the argument for the usefulness for financial accounting research of one particular sign framework: semiology.

3. Theoretical framework: the case for ‘Accounting Semiology’

3.1. *Introducing semiology: a framework for the principles underlying social sign statements*

Dominated by sociology, critical accounting studies have had their focus on the impacts on and consequences of accounting technologies, with less interest in their underlying assumptions and principles. This is especially true for financial accounting, with its detailed and somewhat technical methodologies and practices. In order to apply the research strategy of critical studies with respect to these more traditional domains of financial accounting, a different disciplinary lens may be of use; a different ‘parent discipline’, within which financial reporting practices may be situated, may be of relevance. Such a

⁸ Ball and Brown’s (2014) reference in footnote no. 9 is to “the classic Ogden and Richards”, i.e. to the 1923 treatise: ‘The meaning of meaning: a study of the influence of language and thought and of the science of symbolism’ (Ogden and Richards, 1949 [1923]).

parent discipline would need to have the same objects of enquiry as those of financial accounting (such as the production of financial statements), though with a broader scope of applicability. Importantly, such an approach would have to take into consideration the incompleteness of accounting and would be deemed critical in the sense of 'reflexivity':

[Accounting] is incomplete... Its understanding requires an external and bigger system which includes this system of knowledge and which is incomplete itself. In other words, this system is in need of a critique. Both theories and meta-theories of accounting need to be reflexive (i.e. questioning of the conditions of the production of its knowledge) (Quattrone, 2000, p. 146).

In order to generate reflexivity, a parent discipline must refrain from imposing fixed pre-determined substantive theorems. Burchell *et al.* (1980) have cautioned from surrendering accounting research to pre-given imperatives of functional economics, which must give way for the recognition of "the complexities of accounting in action" (p. 11). In the terminology of Gallhofer *et al.* (2015), we are in search of a meaningful delineation of financial accounting: one which is, on the one hand, not too broad so that the specificity of financial accounting is maintained, but which, on the other hand, is not de-contextualised from the social surroundings in which it operates. This thesis will show that semiology provides one such meaningful delineation in the critical investigation of financial accounting practices.

Introduced a century ago by the Swiss linguist Ferdinand de Saussure, semiology has revolutionised linguistics and has had broad impacts far beyond its discipline. In its core, semiology has shifted the focus of linguistics from a comparative-historical analysis to the synchronic study of language as a social sign system, where terms – words – are viewed as relational value-

bearers in multi-term statements. Sections 3.4-3.6 of this *Introduction* and section 3 of *Paper 3* show the significant fit of semiology to the study of financial accounting as a social sign technology. If there is one single domain, other than *language statements*, for which Saussure's original semiology is of the highest relevance, it is the domain of *financial statements*. Before doing so, however, the next sub-sections 3.2 and 3.3 provide an overview of semiology's intellectual heritage beyond linguistics and its use in the accounting literature in particular. Providing such historical context is important, because, although Saussure's legacy has been influential in broad circles, it has also been frequently misconceived and misjudged.

3.2. *Intellectual context: Saussure's legacy and his recently discovered manuscripts*

Saussure is "generally acknowledged as the father of modern linguistics" (Gordon, 2003, p. 993). However, his famous *Course in General Linguistics*, originally published in 1916 (Saussure, 2012, hereafter the *Course*), has had much broader influence in the humanities, arts and social sciences through its association with structuralism. In his review of the exportation of structuralist ideas from linguistics to other fields, Joseph (2001) argues that: "The rise to prominence of a generalized 'structuralism' in mid 20th century thought, traced to the influence of the posthumous *Cours de linguistique générale* of Ferdinand de Saussure, thrust linguistics onto centre stage in the human sciences to a degree unparalleled in modern times" (p. 1880). Sanders similarly maintains that during the second half the twentieth century, structuralism

dominated some disciplines – linguistics, literary criticism, anthropology, film and media criticism, to mention but a few, and...had a strong impact on others... The main text that inspired, and was constantly cited by, this

movement [i.e., structuralism] was Saussure's *Cours de linguistique générale*, interpreted as the blueprint for describing how the structures of our social and cultural life are constituted, and the way in which once constituted they function as a system of signs. The concepts of the *Cours* thus inspired some of the most interesting and best-known thinkers of the period, in an astonishingly fertile period of ground-breaking work in what were often new disciplines, or radical departures within established disciplines, as well as work that crossed disciplinary borders (Sanders, 2004, p. 2).

However, the association of semiology with structuralism has also been a source for the former's ambiguous scholarly standing in later generations, where structuralism went out of fashion. But a more nuanced historical tracing shows, that in its heyday, the structuralist movement was building less on Saussure's original semiology (which in fact has not used the term 'structuralism' or 'structure'), and much more on the second and third generations. Influential thinkers such as Roman Jakobson and Claude Lévi-Strauss have extended and implemented certain fundamental notions in Saussure's semiology well beyond linguistics, but have also neglected and deviated substantially from some of its key assumptions. While semiology has been restricted to purposeful sign systems operating through statements, structuralism was expanded to realms as far as kinship relations and political theory, where the specificity of purposeful statements is of no relevance. With the expansion from semiology to structuralism, broader insights have been gained but crucial qualities have also been lost. Harris (2003), for example, devotes an entire book to a critical analysis of dominant structuralist figures in terms of their *deviation* from Saussure's original principles. This is how he starts the book:

No one writing about Saussure today needs to take on the task of establishing the historical importance of Saussurean ideas; for that has already been established beyond question and many times over.

Saussure's influence, direct and indirect, dominates the twentieth-century development of those academic disciplines devoted to the study of language, languages, and the analysis of texts. It has also been widespread in disciplines in which Saussure himself laid no claim to personal expertise: these include anthropology, sociology and psychology. However, whether what pass for Saussurean ideas in these various areas are always authentically Saussure's is another question and a much trickier one (Harris, 2003, p. 1).

Structuralism has therefore been broadly associated with semiology, but in fact in a very loose manner. A few of its principles were frequently referred to by a wide spectrum of social scientists and philosophers, but in most cases this has been done with no systematic and direct engagement and frequently not in conformity with Saussure's own principles. Or, as Norris (2004, p. 239) concludes: "It is among the greatest ironies of recent intellectual history that Saussure's meticulous specification of the scope and limits of his project should since have given way to a movement of thought so markedly at odds with his own clearly stated aims and priorities".

This 'expansion through deviation' of semiology is at the background for the preliminary argument of this thesis: a detailed and unmediated Saussurean theorisation is timely even in 2017, provided that it is applied to the relevant domain – that of purposeful social sign systems, whether language or financial reporting.

Such 'expansion through deviation' of semiology to structuralism is also at the background of post-structuralism, which as the label suggests, aims to propose alternatives that avoid structuralism's crucial flaws. Such flaws include the focus on static structures rather than dynamic interactions; the claim for trans-historical phenomena underlying historical contingencies; and a vision of absolute laws dominating socially-dependent and locally-based practices.

However, as the thesis will show with respect to financial accounting, the attribution of these flaws to Saussure's original delineated semiology – as distinct from certain later structuralist branches – is far from being justifiable.

This general line of argument has been gaining ground in recent years, as language theoreticians have revisited Saussure with a claim for complexity, innovation and continued relevance (e.g., Puech, 2004; Meisel and Saussy, 2011; Daylight, 2011, 2012; Joseph, 2012). The increased attention to Saussure's theory is partly attributed to the publication of a new batch of his manuscripts found in 1996, eighty years after the publication of the *Course*. These were published in French in 2002, and in their English translation – '*Writings in General Linguistics*' – in 2006 (Saussure, 2006; hereafter the *Writings*).⁹ While the posthumously assembled *Course in General Linguistics* was in most cases the sole resource for structuralist and post-structuralist interpretations, expansions and critique of Saussure's theory, the *Writings* provide new perspectives, or at least newly accessible emphases, in his original thought with complexities which one could not expect to find to the same degree in his university lectures. Introducing a special issue of the journal *Semiotica* dedicated to the 100th anniversary of the *Course*, Daylight (2017) explains:

The unprecedented subtlety and complexity of Saussure's concepts have meant that he is more often simplified and caricatured – often to the point of representing the position he is arguing against – than profoundly understood. It also means that a great deal of that subtlety still remains to be incorporated into our theorisation of signs and meaning-making.

⁹ The *Writings* contain not only the recently found manuscripts, but also others that were previously published (by 1974) though until then only in French. Still, this is not a comprehensive collection, as additional manuscripts held in Geneva and Harvard are yet to be published (Joseph 2012, pp. 649-650).

The publication of the *Writings*, argue Daylight and other language scholars, provide the opportunity to do precisely that: to rediscover the potential of Saussurean semiology in language and beyond. Harris (2003), for example, has argued that the *Writings* are nothing less than revolutionary with respect to some of Saussure well-known – and frequently misinterpreted – concepts. For example, with reference to the principle that words are the production of the community's practical use (*Writings*, p. 56), which would be of relevance also for this thesis, Harris argues:

The implications are revolutionary, roughly comparable to the suppression of Newtonian cosmology by Einsteinian cosmology. They bring Saussure in one stride from the nineteenth century into the postmodern world. Words no longer have meanings with a stability guaranteed by their relations to physical reality. Nor does words have meanings whose stability is guaranteed by the internal organization of the system of signs to which they belong culturally (which is usually the position attributed to 'Saussure the structuralist') (Harris, 2003, p. 241).

Or, with respect to another principle that would be central also for this thesis, regarding the relationality and dynamism of linguistic values, each value being merely a product of other values (*Writings*, p. 60), Harris argues:

This is an important statement about human communication: perhaps the most important on record in the annals of modern linguistics. It will take linguistics (not to mention literary studies, psychology, anthropology and political theory) at least half a century to take on board its full implications. It outflanks in one sentence not only the classical versions of structuralism (including Chomsky's various generativist versions) but the anti-structuralist criticism of Derrida and his cohorts. It opens up new applications of Saussurean integrationism that have yet to be seen (Harris, 2003, p. 242).

In a similar fashion, Joubert (2006) made the argument that the “recently published Saussure texts shed a strikingly new light on the history of language as *the* critical question of the last forty years” (p. 51). Other researchers have

emphasised the overall consistency of the *Writings* with the *Course* (e.g., Joseph, 2012, p. 650), but the *Writings*, at minimum, highlight some of the frequent misconceptions and unjustifiable criticisms of Saussure, as they highlight – even more than the *Course* – the social, historical and dynamic nature of semiological systems. Be that as it may, as a matter of fact, the *Writings* have been consequential in reviving Saussurean studies (see also Sanders, 2004, 2006; Bouquet and Engler, 2006; Bouissac, 2010; Gasparov, 2013). They stimulate a re-engagement with semiology as a viable and productive framework for the study of social sign systems.

To conclude the above intellectual history overview, the criticism frequently pointed at Saussure by post-structuralist thinkers as by others may be misleading on two accounts: first, it is usually a criticism of post-Saussure structuralism with its all-encompassing scope of applicability and not of Saussure's semiology with its narrowly defined realm of purposeful social sign systems; second, it is based solely on the *Course*, and frequently an indirect reading of it. Giorgio Agamben (1993, pp. 152-158) has argued that Derrida has fallen precisely to such misreading of Saussure, by neglecting some of his (previously published) manuscripts (see similar critique of Derrida's misreading of Saussure by Harris, 2003; Joubert, 2006; Daylight, 2011; and Attell, 2015). It must be emphasised therefore, that the conceptual framework used in this thesis is developed from Saussure's original semiology and not from the latter structuralist frameworks that are only loosely inspired by him, and that it is based on both the *Course* and the *Writings*. Furthermore, the *Writings* include various sources, such as Saussure's preparation notes, his drafts for books and articles, and uncategorised notes, with duplications and lack of order. Setting the theoretical framework for this thesis required the systematic analysis of these manuscript sources – together with the *Course* –

and the production of a thematically organised exposition of the relevant principles. These have been a preliminary stage in this study.

3.3. Semiology in extant accounting literature

With the broader intellectual context briefly discussed above, it comes as no surprise that Saussure's semiology has been used in the accounting literature mostly indirectly and unsystematically.

In a few accounting studies Saussure is mentioned, but only as background for a different theoretical paradigm, frequently from the post-structuralist intellectual arena. In their programmatic paper on accounting research, Arrington and Francis (1989) mention Saussure's differentiation principle as background to Derrida's deconstruction. Arnold *et al.* (1994) briefly refer to Saussure before mobilising the thought of the Russian linguist Volosinov in their analysis of newspaper discourse on health care cost. More recently, in his study of the consumption of accounting signs in the process of a Canadian firm's bailout, Graham (2008) references Saussure once in the introduction to Baudrillard's theoretical framework, which is the one actually used. In Graham's (2013) call to teach accounting as a language, Saussure is not mentioned at all. McKernan (2007, 2011) also provides very brief discussions of Saussure's principles of arbitrariness and systematic differentiation, again only as background for other theoretical paradigms, namely Donald Davidson's philosophy in one paper (2007) and Derrida's thought in another (2011). Similarly, in their paper on auditors' 'true and fair view' opinion, Hamilton and Ó hÓgartaigh (2009) mention Saussure just in order to move on to a discussion about Bourdieu's work. Norman Macintosh's broad project to use the 'linguistic turn' traditions in general, and their continental branch in

particular, in offering critical accounting theory, took the same approach. In Macintosh (2002), Saussure is mentioned only as a background for the actual analysis of other thinkers such as Barthes, Baudrillard, Foucault and Derrida. The same approach is used in Macintosh *et al.* (2000) and in Macintosh (2003), both of which focus on Baudrillard¹⁰.

Other studies have made reference to accounting as a Saussurean sign system, though such references have been mostly brief and unsystematic. Lehman and Tinker (1987) were among the first to use Saussure in their analysis of arbitrariness in accounting. They state – in parenthesis (p. 517) - that "(A sign system includes languages, pictorial representations, written significations, financial accounting representations, etc.)". A similar reference is found in Tinker (1991), though with broader discussion of semiology's arbitrariness (that study will be addressed specifically in *Paper 1* in the context of the accounting manifestation of the semiological value). Walton (1993) briefly refers to two of Saussure's arguments: signs operate within specific cultural groups, and they change over time, and Parker (1994) points to Saussure in discussing the changing character of "accounting words". Evans (2004), in her discussion of the challenges of translating international accounting standards, makes use of Saussure's insight that words in different languages are not always equivalent. The same notion is mobilised in Evans *et al.* (2015). None

¹⁰ The lack of direct engagement with Saussure's semiology is emphasised when compared to the overall increased interest in modern and postmodern continental theorists in critical accounting studies. For a bibliographic analysis of such increasing influence by French thinkers see Chiapello and Baker (2011); Saussure was Swiss, but, as shown for example by Joseph (2001) and Unger (2004), his influence has been significant on such leading French theorists of the twentieth century.

of the accounting studies have made reference to any of Saussure's own writings; they all build exclusively on the *Course*.

What is also common to many of these 'Saussurean' accounting studies is that semiology has been employed in order to investigate linguistic texts, such as the narrative parts of corporate reports or terminologies of accounting standards and principles. Even in a broader perspective that includes other semiotic traditions, the object of enquiry has been mostly texts included in accounting and management communication and practices (Fiol, 1989; Cooper and Puxty, 1994; Crowther *et al.*, 2006; Davison, 2008, 2011b; Malsch and Gendron, 2009; Breton, 2009). These textual analyses may be grouped under the title second-order linguistic semiology: they remain in the realm of language, but investigate its second-order signification vehicles such as metaphors, myths and narratives (see Barthes, 1968, 1993, 1997; Greimas 1983, 1989). A complementary literature is the one investigating the visual aspects of accounting communication, such as pictures and graphs, through semiological or semiotic lenses (e.g., Preston *et al.*, 1996; Davison, 2011a).

The focus of the previous accounting literature highlights another distinct aspect of the current thesis. Not only that it aims to mobilise Saussure's original semiology and not a structuralist/post-structuralist approach in light of the former's better fit to accounting as a purposeful social sign system; and not only that it aims to do so more systematically than in previous studies, through Saussure's own manuscripts as well as his posthumously edited *Course*. It also aims at a different object of enquiry: the financial-numerical parts of the core financial statements, and not the accompanying textual or visual parts. Indeed, there is vast literature "on written accounting communication via public written narratives outside the audited financial

statements" (Merkel-Davies and Brennan, 2017, p. 437), but very little on the numerical communication in the financial statements themselves. This contrast is illustrated in Davison's recent review (2015) of visual research in accounting, where she mentioned that "Semiotics is a large field, closely related to linguistics, devoted to the systematic study of signs, whether, for example, words, images, music, gestures or fashion" (fn. 7 in p. 152). The only sign not mentioned is the numeric sign, which is the one that financial accounting is most distinctively occupied with, and which this thesis is set to investigate.

3.4. Semiology's main characteristics illustrated in financial accounting

In order to assess the suitability of semiology as a disciplinary lens in the study of financial accounting, this section briefly presents semiology's main principles – a product of a thematically organised analysis of the *Course* and the *Writing* – and illustrates their applicability to financial accounting. The following is meant neither to be a detailed exposition of semiology's principles, nor to analyse specific accounting rules, but rather to provide the initial context for the study of the specific issues – relating to asset measurement and recognition – which will be addressed in detail (from both accounting and semiology dimensions) in the thesis' three *Papers*.¹¹

¹¹ As this section is merely providing the general context for the core studies, reference is made here to the IASB and FASB conceptual frameworks, though in the analysis of the specific issues in the *Papers* the focus is IASB's actual standards and other prescriptions, while the conceptual framework is in fact challenged and problematised.

3.4.1. *The social nature of semiological systems*

Language as a “social fact” (*Course*, p. 6) is a theme frequently emphasised in both the *Course* and the *Writings*. It serves as the fundamental starting point in Saussure’s analysis. Language is never complete with any individual, as it may come into existence only through the collective (e.g., *Course*, pp. 9, 10, 77, 91; *Writings*, pp. 64, 78, 120, 196, 208). For Saussure, “A sign system, if it is to be so called, must be part of a community – indeed, only as such does it constitute a sign system at all” (*Writings*, p. 202). The community is the source of innovation in sign systems (*Writings*, p. 64), and the “true locus of development, towards which, right from its very inception, a sign system moves” (*Writings*, p. 203).

Similar to language, the social foundations of financial accounting are undisputed. This has been emphasised in the various studies of accounting as a vehicle articulating political and ideological concepts such as competitiveness, markets and efficiency (for reviews see, e.g., Chapman *et al.*, 2009; Mennicken and Miller, 2012; Miller and Power, 2013). However, one need not go to critical scholarship in order to realise the social factors underlying the accounting system. The FASB’s conceptual framework acknowledges this understanding explicitly. For example, SFAC 1 (FASB, 1978) provides the social background in light of which accounting objectives should be evaluated: “Accordingly, the objectives in this Statement are affected by the economic, legal, political, and social environment in the United States” (para. 9). The conceptual framework continues in describing the United States as “a highly developed exchange economy” (para. 10), with explanation of neoliberal concepts, such as savings, production, consumption, free markets, optimal allocation of capital, and the role of state intervention.

Similar reference to the social and political context of accounting is included in the introduction of SFAC 2 (FASB, 1980, para. 2) addressing the qualitative characteristics of accounting information. Given its international focus aiming to reach out to a heterogeneous group of countries, the IASB removed these explicit references to the social and political context of financial reporting. Obviously, the removal of these references does not prejudice the conclusion regarding the social underpinnings of financial accounting.

Furthermore, and as shall be further discussed in the *Papers*, the semiological system is a product of the usage and acceptance by the community (*Course*, p. 113), and therefore meaning is determined by use (*Writings*, pp. 52, 56) and is not inherent or fixed. Thus, a "word only truly exists, however one views it, by being sanctioned in actual use by speakers of the language" (*Writings*, p. 56). According to Saussure, "the people are the judge of what the language is, not the poets or the linguists" (Joseph, 2016, p. 198).

In accounting as well, meaning and rules are the evolving products of use, and not of intrinsic or essential criteria (e.g., Hatherly *et al.*, 2007). Development in accounting comes not only from the 'external' standard-setting authority, but is also a product of a cumulative communication processes anchored in practice. Such understanding lies at the core of Power's (2009) analogy of financial accounting to *Lex Mercatoria* (i.e., trans-national commercial law evolving from practice rather than from sovereign rule-making bodies). Murphy *et al.* (2013) have also emphasised how the 'living law' of the community's practice is embedded in the most fundamental aspects of accounting, notwithstanding formal pronouncements issued by the standard setters. Even in an era of relatively detailed standard-setting, the role of interpretation in accounting, which is practice-based, is significant.

3.4.2. *The sign's arbitrary nature*

Semiology applies to only one very specific type of signs, that is, arbitrary signs (*Course*, p. 68; *Writings*, p. 147). The sign's two parts – the '*signifier*' (expression) and '*signified*' (conceptual content) are fundamentally inseparable (e.g., *Course*, p. 66; *Writings*, pp. 26, 28, 32, 63, 79). Their interrelation may be grounded in nothing more than arbitrariness (*Writings*, pp. 41, 146-147; *Course*, pp. 15-16, 66, 76). The sign system (*langue* in Saussure's terminology) is based neither on natural relations nor on purely logical reason (*Writings*, pp. 145, 149, 238-239). As it belongs to a community, the sign may not guarantee a rational reason between signifiers and signifieds (*Writings*, p. 202).

The accounting sign – for example, an entry of an 'intangible asset' in the statement of financial position – is also characterised with arbitrariness. The mere fact that we have more than one set of accounting standards composed of different (and sometimes contrasting) rules is the most trivial evidence of its arbitrariness (see *Course*, pp. 67-68, for a similar argument regarding the diversity of human languages). IASB's current conceptual framework acknowledges that "a single economic phenomenon can be faithfully represented in multiple ways" (IASB, 2010a, para. QC25), and this fundamental understanding lies at the heart of its requirement (at least in principle) to enhance consistency and comparability by the application of the same methods across periods and between companies. Furthermore, even within a single accounting system the same phenomenon may be represented differently in different circumstances (for example, intangible assets, which are recognised if purchased from a third party but ignored if internally generated). More broadly, the arbitrary nature of the accounting sign is manifested in notions such as 'reliability' and 'representational faithfulness',

which have shown to be grounded in institutional power rather than on a scientific ideal of accurate measurement (e.g., Power, 1992, 2010; Napier and Power, 1992; Erb and Pelger, 2015).

3.4.3. *Limitation on arbitrariness: differentiation and classification*

Arbitrariness is a quality of the semiological sign but not of the system as a whole, which has coordinative and organisational faculties (*Course*, p. 13). The solidarity of the system limits the impact of the arbitrariness of the sign by providing some order and regularity (*Course*, p. 133). The language is not purely arbitrary nor purely logical (*Writings*, p. 238; *Course*, p. 73). Thus, “Reduction in any system of *langue* of absolute arbitrariness to relative arbitrariness; this is what makes up the ‘system’” (*Writings*, p. 233). The Saussurean paradigm emphasises the systematic and classificatory nature of language, which is not merely an aggregate of signs (*Paper 3* expands on the non-substantive, or: procedural, nature of such consistency).

In accounting, the various statements, such as the balance sheet, the income statement and the cash flow statement, also constitute a set with internal relations. Changes in asset and liability measurement in the balance sheet relate to the income statement, and the generation of income relates to the assets or liabilities in the balance sheet. Generally, whether directly or through the statement of other comprehensive income, the balance sheet and the income statement interrelate and are synchronised (and so do other statements, such as the income statement and the cash flow statement).

More fundamentally, the ongoing task of language in introducing order into arbitrariness is done primarily through classification. Conceptually, and as shall be further discussed in *Papers 2* and *3*, the semiological development

process starts from the system in order to obtain the particular signs and not the other way around (*Course*, p. 113). While the practical application and use of language by individuals in speech (Saussure's '*parole*') take the form of synthesising existing elements (signs) to build a specific utterance (see: *Writings*, p. 197; *Course*, p. 50), the system as a whole (Saussure's '*langue*') is developing through differentiation and categorisation. Thus, assuming that units of language are pre-existing organised wholes is merely an illusion (*Writings*, p. 75). The development of the system of language is from the whole to the differentiated specific elements (*Course*, p. 21).

Categorisation also plays a crucial role in accounting, which facilitates analysis by classifying financial statement information in groups. The elements of financial statements are a product of such classificatory activity: "These broad classes are termed the elements of financial statements" (IASB 2010, para. 4.2). Accounting's classification is multi-layered. Initially information is classified into the different types of statements, i.e. assets, liabilities and equity in the balance sheet, and income and expenses in the income statement (*ibid*). These are then further divided into sub-classifications, for example "assets and liabilities may be classified by their nature or function" (para. 4.3), and so on, all with a view to produce more granular (and therefore informative) statements.

Similar to semiology's focus on the categorisation, differentiation and articulation of expression and content in the production of apprehensible identities (see *Course*, pp. 33, 103, 112; *Writings*, p. 176), accounting principles organise, categorise, frame and operationalise the flux of economic knowledge (Carruthers, 1995; Suzuki, 2003; Quattrone, 2009; Power, 2012; Mennicken and Miller, 2012). As shall be further discussed in *Paper 3*, typical for a semiological

system, categorisation in accounting is neither fixed nor stable; it is neither technical nor neutral. The discussion in *Paper 3* will also show that systematic categorisation accounts for only one aspect of both semiology's and accounting's articulation of the 'confused mass' into distinct entities.

3.4.4. Immutability and Mutability: stability and development

Language is not a simple contract that is voluntarily and freely executed and re-executed by all members of the community. Rather, its rules are, more modestly, tolerated by the collective (*Course*, p. 71). The power of the individual, or even of a group, to change the language is limited. Language involves numerous elements, constantly employed and shaped by numerous and changing users. This complexity is an obstacle for inciting voluntary change (*Course*, pp. 73-74). As a collective phenomenon positioned in time, the solidarity of the past is always present and with significant consequences of stability (*Course*, 74).

On the other hand, being positioned in time also means that evolution is inevitable (*Course*, pp. 228-230). As language originates in the use of the collective, the social sphere is never static and its force is reflected in change through time (*Course*, pp. 74-76). Continuity and mutability are in a close-knit relationship with one another (*Writings*, pp. 104, 235, 239). Furthermore, even in the case of an artificial language (Saussure refers to Esperanto as an example), there is no absolute control over the language and its development. The creator of such language controls it only before its actual use. Once the (artificial) language starts to circulate, its attachment to its foundation is terminated (*Course*, p. 76).

Consistency and development are both inherent also to financial accounting. Consistency in applying accounting principles and policies is an essential feature in achieving comparability, which is one of the (enhancing) qualitative characteristics of useful financial information (IASB, 2010a, para. QC 22). Consistency allows for the comparison between different companies, as well as the assessment of the same company along different time periods. At the same time, “consistent use of accounting principles...if pushed too far, can inhibit accounting progress” (SFAC 2, FASB 1980, para. 122). In its introduction to the qualitative characteristics of accounting information, SFAC 2 makes clear that: “Although those characteristics are expected to be stable, they are not immutable. They are affected by the economic, legal, political, and social environment in which financial reporting takes place and they may also change as new insights and new research results are obtained” (para. 2). The IASB’s framework is different in that regard from the FASB’s framework, as it avoids explicit reference to such socio-political changing factors. However, as acknowledged in the literature, “Accounting changes, and those changes are part and parcel of changing social and economic relations... It has changed significantly across time, adopting new forms, devices and roles. We need to study those changes, rather than treat the present forms of accounting as immutable” (Chapman *et al.*, 2009, p. 2).

The dynamic nature of accounting reinforces the argument made earlier that the authority of accounting comes not only from the standard setter, but also from the use and the continually developing community acceptance (Power, 2009, 2010; Murphy *et al.*, 2013). As in Saussure’s Esperanto, the standard-setter’s control over its rules terminates upon their circulation within the professional community, as interpretation in specific applications is mostly driven by practitioners. A few dozen formal interpretations could never

account for the numerous circumstances that the corporate world – with its statement prepares and auditors – has to address each and every day.

3.4.5. *The linear nature of the signifier*

Distinct from visual symbols, such as pictures or diagrams, language's acoustic or written signifiers span only one dimension. In Saussure's paradigm, the linguistic signifier is characterised by one-dimensional linearity (*Course*, p. 70). The signifier unfolds in one dimension and in one direction (*Writings*, pp. 75-76). As language aims at facilitating communication and conveying messages, it requires the positioning of two or more signs in a certain relation (*Course*, p. 50). The linear nature of the signifier allows the application of language in actual discourse (*Course*, p. 123).

A financial statement is also comprehensible in a linear fashion. This is not to argue that all users would read financial statements by going through each and every line in a certain fixed order. However, accounting items are generally not viewed in isolation but are part of broader categories, and the various items - not necessarily all, but usually more than one – are read and processed in a linear unfolding manner. Items in the statement are interrelated in a meaningful way to gain significant knowledge. Additionally, as in language, reading a financial statement is usually done with a distinct 'direction'. For example, the income statement unfolds from top (revenue) to bottom (net profit). The important point here is that the elements of financial statements are not considered aesthetic artefacts, but rather structured to allow an analytical process which at any point in time progresses in only one dimension to enable the apprehension of meaningful relations.

3.5. The relation between semiology and linguistics and the space for financial accounting

The exposition of the above principles may serve as the basis for addressing an important issue for this thesis: the relation between the general framework of semiology and the specific discipline of linguistics in Saussure's original thought. His focus was on developing a theory of language and his terminology in most cases is that of the language system, but this is embedded in a more ambitious objective of presenting the characteristics of a general science dealing with "the life of signs within society" (*Course*, p. 16). Both the *Course* and the *Writings* contain a few explicit references to semiology and sign systems in the broad sense, and these are given with respect to the most fundamental principles, such as the social character of the system and arbitrariness. The narrower linguistic terminology used in other places should not constrain our own evaluation of the broader applicability of Saussure's linguistically-framed principles in light of his overarching semiological themes.

This approach is supported by Saussure's own statements with respect to the relation between semiology and linguistics. His general observation is that linguistics is a sub-field within semiology (*Course*, pp. 16, 68), a point which is further emphasised in the *Writings*. Language may have certain qualities that make it different from other semiological systems (*Writings*, p. 188), but overall "language is merely one case of the sign among others, and may not be judged independently" (*Writings*, p. 150). In this context, Saussure also makes a brief reference to numerical signs: "Language is merely a *specific case* of the theory of Signs... within the general theory of signs the specific case of vocal signs might not be incalculably more *complex* than all the specific known cases, such

as *writing, numerals, etc.*" (*Writings*, p. 154). Saussure concludes: "Whatever differentiates *langue* from other semiological systems must be regarded as its least important aspect" (*Writings*, p. 201). These statements pave the way to treat Saussure's linguistic principles as semiological principles.

As discussed in section 3.2, one of the misfortunes of Saussure's legacy is the expansion of its applicability well beyond the boundaries for which it was designed – purposeful social sign systems. Here we must also caution against the opposite concern: semiology is not only applicable to the human language. It may be relevant also to other purposeful social sign systems. The narrow gap between semiology and linguistics is precisely where financial accounting – as a numeric rather than linguistic semiology – comes in. As shall be further developed in *Paper 3* (in particular in its section 3), with its subjection to mathematical aggregation and commensuration, accounting is different from natural language. Accounting is therefore not a second-order language but rather stands in parity with linguistics, and, as illustrated in *Figure 1* below, both share semiology as a parent framework.

3.6. Conclusions: the feasibility and justification of Accounting Semiology

The above discussion has laid out fundamental aspects for the potential usefulness of semiology in the critical theorisation of financial accounting. First, with its applicability to all purposeful social sign systems and not only to human language, semiology is broad enough to encompass accounting. Second, with its applicability *only* to purposeful social sign systems, as distinct from the 'all-encompassing' structuralist tradition, semiology is narrow enough for applying it to accounting in a meaningful and not a vague and generic fashion. Third, with the recent publication of Saussure's *Writings*, a

systematic and direct analysis of his thought – as distinct from the usual sporadic and indirect reference to some of the *Course's* principles – reveals complexity and conceptual relevance in theorising the operation of social sign systems and highlights how some of the fundamental criticisms frequently pointed at Saussure are unjustifiable. Fourth, all five main characteristics of the semiological system – social character, arbitrariness of the sign, classificatory nature, immutability-mutability and linearity – apply to financial accounting.

In addition, the analysis in *Paper 3* complements and refines the 'case for semiology' with two important issues. First, semiology provides a more nuanced and meaningful delineation (Gallhofer *et al.*, 2015) to accounting when compared to other semiotic traditions, which are not restricted to the social realm or to purposeful sign technologies. The meaningful disciplinary intersection of accounting with semiology is illustrated in *Figure 1* below.

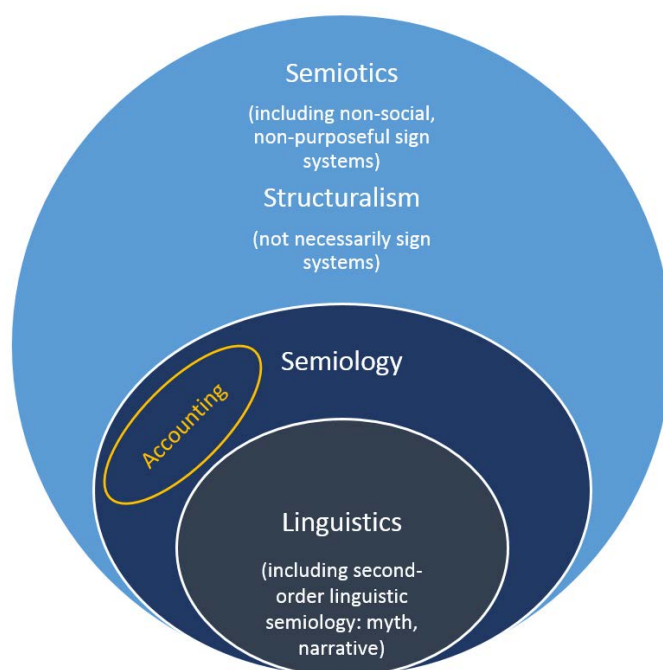


Figure 1: The disciplinary intersection of accounting and semiology

The second and most important point in *Paper 3* that complements the ‘case of semiology’, is the latter’s focus on the non-essence of the sign, which provides a theoretical anchor to a core assumption in critical studies regarding the non-essence of accounting (e.g., Burchell *et al.*, 1985; Miller and Napier, 1993; Miller and Power, 2013). Overall, the combined discussion in this section and in *Paper 3* makes the argument that semiology can be a meaningful and critical ‘parent discipline’ in the study of financial accounting as a distinct social phenomenon – as a social sign technology.

This also raises semiology’s potential to address the limitations of economics-based theorisations in accounting research, with their substantive efficient-market assumptions. As discussed in section 2.2 above, the realisation of such limitations in realistic markets have played a role in the disengagement from conceptualisation efforts by the main research schools and the favouring of the ‘informational perspective’ (Beaver, 1981 further to Ball and Brown, 1968). However, if the exclusive reliance on the ideal and restrictive assumptions of financial economics has been restraining the ‘normative’ tradition (e.g., Whittington, 2015a, p. 557), the way forward does not need to be an abandonment of accounting conceptualisation altogether. Another avenue would be to use a less restricted framework. As shall be elaborated in *Paper 3*, this is precisely what semiology offers: a ‘minimal’ procedural (Quattrone, 2015a) framework that does not rely on substantive assumptions.

One last (but not least) dimension in semiology’s applicability to accounting must be explicated – this is the ethical justification embedded in pursuing it as a research agenda. One of the *Course’s* first observations relates to the public

interest in understanding the nature and complexities of language as a sign system: “Still more obvious is the importance of linguistics to general culture... That linguistics should continue to be the prerogative of a few specialists would be unthinkable – everyone is concerned with it in one way or another” (*Course*, p. 7). Saussure continues, that this broad interest is coupled with the fact that prejudices, mirages and fictions are abundant in linguistics (*ibid*). Amending the then-prevailing flaws in the understanding of such a science is of public significance. A third element in Saussure’s justification for the study of the semiological principles of language is the complexity of language, and the fourth – its elusiveness. Its users cannot see it, and it must be grasped through reflection (*Course*, p. 73). In such circumstances, and with such implications, Saussure calls for a normative task of unravelling misperceptions and illusions that run deep in contemporary accounts of language (*Writings*, pp. 136-137).

This depiction of the context and motivation of semiology – an important branch of the ‘linguistic turn’ of the early 20th century – could be used, just as much, in describing the context and motivation of critical accounting studies almost a century thereafter. Critical scholars also acknowledge the importance of accounting to individuals and societies, beyond the boundaries of the professional arenas: “Accounting is too important to be studied only by accountants!” (Chapman *et al.*, 2009, p. 21). As with Saussure in language, the founding fathers of the critical accounting community – scholars like Hines and Hopwood – have realised the consequences of misconceptions in contemporary accounting and have called for their unmasking (Hines, 1988, p. 256) or, more politely, for “a major investment in new conceptual thinking” (Hopwood, 1985, p. 367). The critical strand highlights the complexities of accounting and the need for greater reflection on it.

As Joubert (2006) argues, Saussure brings out the language itself as a problem; the power of language as a critical force, conceptual and political. Especially in the *Writings*, Saussure is "keeping the question of language on its toes" (*ibid*, p. 51). This, so it seems, would be an appropriate guiding theme in the studying of accounting as well. Roland Barthes describes this ethical dimension as the "ideological commitment of semiology", which is applicable to the "symbolic and semantic system of our entire civilisation" (1994, p. 8). He stresses, that "it is not enough to seek to change contents, we must above all aim at *fissuring* the meaning-system itself" (*ibid*). We must, as a first step, become familiar with the characteristics, sometimes covert, of meaning-systems and their signifying capacity; here, of one specific meaning-system: financial accounting.

With such fit, potentiality and justification, this thesis aims to harness semiology in the study of some of accounting's most fundamental principles – asset recognition and measurement – and in challenging some of their taken-for-granted assumptions.

4. Papers presentation and research questions

The previous sections of this *Introduction* chapter have shown, on the one hand, the relative disengagement of critical interdisciplinary accounting studies (as well as that of the positivist research approach) from the principles, techniques and assumptions underlying contemporary financial accounting practices, and, on the other hand, the potential of semiology to take part in re-engaging the two spheres to one another – in broadening the investigation of accounting as a purposeful sign technology. The three *Papers* that follow build on the above general observations and engage with specific issues that are of

importance in current academic debates and of relevance to policy-making. The current section provides a brief description of the *Papers* and the research questions they address.

4.1. Paper 1: asset measurement

The issue addressed in *Paper 1* is asset measurement, and more specifically: fair value measurement (hereafter *FV*) as prescribed by the IASB. The trigger for this *Paper's* engagement with *FV* is twofold. First, the *CFED* is the first conceptual framework to systematically address measurement (as distinct from merely listing the various measurement bases in use), a sensitive issue that current frameworks of both the IASB and FASB have so far preferred not to tackle. Second, *FV* measurement has been debated in recent literature as the ultimate manifestation of a phenomenon of broader social significance: the financialisation (or marketisation) of accounting.

As the issue is of timely relevance for both accounting academics and policy makers, the *Paper* sets out to assess a fundamental assumption that these two constituencies generally share: that “fair value is a market-based measurement, not an entity-specific measurement” (IFRS 13.2 – IASB, 2011; and similarly in the *CFED*, paras. 6.22, 6.35). Its main research question is: to what extent is fair value measurement – as prescribed in IASB’s pronouncements – an exclusively market-based and not entity-specific concept? As a preliminary step in investigating this question, the *Paper* addresses another research question: what is the characteristic that distinguishes market-based measurement from entity-specific measurement?

The analysis of the IASB’s measurement prescriptions for the purpose of answering the above questions is done using semiology’s value framework as

a conceptual lens. From Saussure's *Course and Writings*, the *Paper* constructs the principle of *value constellation*: value is not intrinsic but rather a relational product of other values. Crucially, it is a product of other values in the system (in this case: the market) and in the statement (in this case: the firm).¹² With such theory-informed analysis of the IASB's pronouncements, the entity-specific perspective is reframed as sensitivity to interrelations between value-bearers in the statement, thus avoiding the frequently assumed though contestable dichotomy between present objective facts (market-based) and subjective estimation of the future (entity-specific). More importantly, with such analysis *FV* is shown to incorporate both market-based and entity-specific dimensions. The IASB's measurement practices are more in line with semiology's two complementary inputs (the market *and* the entity) than with the two dichotomous outputs proposed in the *CFED* (*FV* or value-in-use).

Paper 1 therefore fractures the market/entity contrast and locates such fracture in the IASB's own prescriptions and in the characterisation of accounting value as a semiological value, with implications in and beyond the *FV* debate. These include, on the one hand, accounting policy-making issues such as business-model measurement, and, on the other hand, theoretical developments in 'valuation studies' that are of relevance beyond financial accounting.

4.2. *Paper 2: asset recognition*

Paper 2 addresses the issue of recognition, and more specifically the role of separability in asset recognition. The academic and policy background to the issue of asset recognition is very different from that of measurement. First,

¹² The concept of 'value constellation' is distinct from, but not unrelated to, the concept of 'accounting constellation' introduced by Burchell *et al.* (1985), as discussed in detail in *Paper 3*.

extant literature of recent years has paid relatively little attention to asset recognition, and such limited engagement has been mostly restricted to the recognition of intangible assets. As to the standard-setting arena, while the *CFED* claims to introduce measurement criteria, it proposes essentially to retreat from recognition criteria, i.e. the recognition thresholds of probability of future economic benefits and reliability of measurement. The *CFED* adds one recognition factor that is portrayed as minor and not applicable to the vast majority of cases, namely: “existence uncertainty and separability” (paras. 5.13-5.14). This seemingly marginal issue – separability – is at the core of the analysis of *Paper 2*. Against this background, the *Paper’s* main research question is: what are the role and characteristics of separability in the recognition of assets of all types, specifically with a view to preparers’ judgment involved in recognition?

Paper 2 takes a research approach similar to *Paper 1*, i.e. a systematic analysis of the IASB’s asset recognition prescriptions through the conceptual lens of semiology. The analysis involves ten standards, one exposure draft and one discussion paper that together cover all main asset types, including tangible, intangible, biological and minerals, oil and gas assets. From Saussure’s teaching and manuscripts, *Paper 2* constructs the principle of *reciprocal articulation* as the one capturing the way in which social sign system operate: as an alternative to the concept of representation in theorising the process of knowledge production. Accounting entries (‘expression’) are not passive representations of pre-existing economic resources (‘content’): both are mutually constituted by delimiting the resource/asset from its broader category (or from the firm as a whole).

Paper 2 shows how separability, as a manifestation of reciprocal articulation, is at the core of recognition. It further characterises separability – as reciprocal articulation – as indeterminate by extra-accounting factors (e.g., physical or legal qualities). As there is no one predetermined manner of articulating the firm to distinct assets, the *Paper* shows that the plasticity of assets is applicable to all asset types, even those with the most rigid physical boundaries.

The *Paper's* analysis has implication as to the locus and scope of judgment involved in recognition: instead of a Yes/No threshold that characterises the traditional understanding of recognition as representation, the *Paper's* theorisation of recognition as articulation entails a spectrum of options with a broader scope of judgment. The judgment involved in financial reporting is not only with respect to the measurement of items (e.g., an asset), but also with respect to the articulation – recognition – of the item to be measured. The *Paper* brings to light the articulatory power, by standard setters and statement preparers, that brings accounting assets into existence.

4.3. *Paper 3: the semio-logic of financial accounting*

Paper 3 is a conceptual paper that, building on the analyses of the previous two *Papers*, relates semiology to financial accounting through the issue of the non-essence of accounting. Distinct from the organisational and institutional tradition, that has taken a genealogical approach showing the malleability – and lack of intrinsic essence – of accounting through socio-historical changes (Miller and Napier, 1993; Miller and Power, 2013), *Paper 3* employs a semiotic, procedural (Quattrone, 2015a) approach to accounting as a social sign technology. It investigates the non-trivial juxtaposition between the non-essence of accounting and its distinctive power over its surroundings in one

particular accounting technology: the statement of financial position. The *Paper's* research question is therefore: how can the non-essence of accounting be theorised in the specific context of the balance sheet in a manner that would account for both the malleability and power of accounting in relation to its social contexts?

The *Paper* complements the argument made earlier in this *Introduction* about the usefulness of semiology in financial accounting research: it makes the case for semiology as providing a meaningful delineation to financial accounting. The *Paper* reconstructs and builds on semiology's theorisation of the non-essence of the sign: for Saussure and his advocate, Roland Barthes, the sign is characterised by its lack of (material or semantic) substance, but the sign system as a whole is nevertheless not chaotic. While Miller and Power (2013) have argued that "there is no accounting logic as such, there is no accounting essence" (p. 592), *Paper 3* brings to the surface – with semiology – a distinction between essence and logic. The building blocks of the balance sheet – the values of assets – have no essence, as they are merely constellations of other values, a product of reciprocal articulation. But the operation of the balance sheet in the accounting system does have a logic: a non-essentialist logic. Such logic does not build on substantive legal or economic theorems, but rather on procedural qualities (Quattrone, 2015a) of knowledge production. The concepts of reciprocal articulation and value constellation are therefore offered as the procedural logic of the balance sheet: its *semio-logic*.

The *Paper* shows that the theorisation of such a logic is of importance, as it sheds light of the relation between accounting as a distinct social sign technology and the contexts in which it operates. The semiological characteristics of the accounting technology are pre-conditions to the

‘accounting–society interpenetration’ (Burchell *et al.*, 1985, p. 385). It shows how accounting's power over its social surroundings is, partly, the power of articulating the unarticulated, and the non-essence of accounting is, partly, the non-essence of its building blocks: value constellations. Put differently: the paper argues that the genealogical socio-historical concept of ‘accounting constellation’ (Burchell *et al.*, 1985) should be complemented with the semiological concept of ‘value constellation’.

Through its five chapters – this *Introduction*, the three *Papers* and the *Conclusions*, the thesis aims to stimulate the general and concrete benefits of intersecting accounting and semiology. Importantly, this is done not by applying the existing linguistic semiology to accounting-related texts as has been done in previous research. The aim of the thesis is rather to develop and mobilise a non-linguistic semiology applicable to core financial statements; it is to introduce a financial-numeric semiology: an *Accounting Semiology*.

How Fair Value is both Market-Based and Entity-Specific: The Irreducibility of Value Constellations to Market Prices

Abstract

The objective of this paper is to problematise the fundamental assumption, shared by standard setters and extant literature and one that underlies the recent debate on accounting financialisation, that “fair value is a market-based measurement, not an entity-specific measurement” (IFRS 13.2). The paper shows how it is both. This is done by stepping outside the conventional disciplinary resources of accounting – economics and finance – and mobilising an alternative value framework: Ferdinand de Saussure’s semiology. Semiology’s value is a two-dimensional constellation, i.e. a relational product of other values in the system (the market) and in the statement (the firm). With this framework, the paper analyses measurement practices prescribed by IASB’s guidance to explicate its underlying implicit concepts as distinct from those formally proclaimed in IASB’s recent Conceptual Framework Exposure Draft (*CFED*). Such analysis leads to two main insights. First, the entity-specific perspective is reframed as sensitivity to interrelations between value-bearers in the statement, thus avoiding the frequently assumed though contestable dichotomy between present objective facts (market) and subjective estimation of the future (entity-specific). Second, fair value measurement is shown to incorporate both market-based and entity-specific dimensions. IASB’s measurement practices are more in line with semiology’s two complementary inputs (the market *and* the entity), than with the *CFED*’s two

dichotomous outputs (fair value *or* value-in-use), and the market/entity contrast is thus fractured.

Keywords: entity-specific measurement; fair value; financialisation; market paradigm; semiology; value constellation

1. Introduction

The emergence of fair value (*FV*) as the predominant measurement concept in international accounting has been related to a broader social, economic and political shift towards the market paradigm in and beyond economic spheres (Power 2012; Müller, 2014; Chiapello, 2015). *FV* has been conceived as a manifestation of a vision “of the market as the ultimate ‘auditor’ of asset and liability values” (Power, 2010, p. 198). This ‘financialisation’ or ‘marketisation’ in accounting (Mennicken and Millo, 2017; Zhang and Andrew, 2014; Georgiou, 2015) is reflected in the opening statements of IFRS 13 *Fair Value Measurement* (IASB, 2011, para. 2): “**Fair value is a market-based measurement, not an entity-specific measurement**”. The aim of this paper is to show how *FV* is both market-based *and* entity-specific, and how the identification of *FV* with the market glosses over an important dimension in valuation, with implications in and beyond the theorisation of extant accounting measurement practices.

While the critique of *FV* in terms of its appropriate scope of applicability in contrast to Historical Cost (*HC*) has been widely debated (e.g., Penman, 2007; Laux and Leuz, 2009; Whittington, 2015b), the monism of *FV* itself as a purely market-based measurement has been generally taken for granted. In

problematising this characterisation of *FV*, the paper complements three recent studies showing the fragility of the market/entity dichotomy: Barker and Schulte (2017) have shown that in market-based measurement preparers cannot ignore entity-specific circumstances; Huikku *et al.* (2017) have shown that in entity-specific measurement for impairment testing, preparers cannot ignore market-based parameters; and Mennicken and Millo (2017) have problematised the market/entity divide similarly in the specific case of impairment. This paper's analysis reconciles and generalises these findings, and anchors the fracture of the market/entity divide in the standard-setter's own prescriptions and, as explained below, in the characterisation of *FV* as a semiological value.

To challenge the market/entity dichotomy and the market paradigm underlying it, the paper proposes stepping outside accounting's conventional lenses of economics and finance, and mobilises Ferdinand de Saussure's semiology as an alternative value framework. A century ago, semiology transformed our understanding of *language* statements by moving from the impasse of representational 'meanings' to pragmatic relational 'values' (Barthes, 1994). It sheds light, this paper argues, also on the nature of 'values' in *financial* statements.

The strategy of broadening the theorisation of value beyond its traditional boundaries has become popular in other realms of the social sciences, which are sometimes referred to as 'valuation studies' (e.g., Helgesson and Muniesa, 2013; Kornberger *et al.*, 2015; Antal *et al.*, 2015). However, these have so far paid little attention to "the nuts and bolts" of the accounting infrastructure (Vargha, 2016; Mennicken and Millo, 2017; Mennicken and Sjögren, 2015). Semiology, it will be shown, can contribute to filling this gap, in light of its

distinct focus – as the focus of financial accounting – on values within multi-value statements.

Under semiology's framework, introduced in Saussure's *Course in General Linguistics* (2011 [1916], hereafter the *Course*) and in his more recently published manuscripts (2006, hereafter the *Writings*), the value of a term in a statement is not a product of natural or rational anchors – it is not intrinsic, but rather the product of relations with other values. A value is merely a “center of constellation” of other values (*Course*, p. 126), but in two different and complementary dimensions: it is a product of differentiation from other values in the system (the ‘associative’ axis) and of interrelation with other values in the statement (the ‘syntagmatic’ axis). Previous semiology-inspired conceptualisations of value in accounting (Tinker, 1991) and beyond it (e.g., Graeber, 2002) have tended to gloss over the latter of these two dimensions, which is crucial to an understanding of value as situated rather than abstract.

IASB's conceptualisation of current value, as recently formalised in its Conceptual Framework Exposure Draft (IASB, 2015; hereafter *CFED*), stands in contradiction to the above semiological principle: the *CFED* envisions, as does the extant literature, not complementary inputs but rather dichotomous outputs: purely market-based *FV* is contrasted with purely entity-specific Value-in-Use (*VIU*). This conceptual dichotomy, which sustains the alleged purity of *FV*, is being challenged here through the analysis of asset measurement practices prescribed by IASB's own standards relating to the determination of *FV* and *VIU* – IFRS 13 and IAS 36 (IASB, 2004a) and their related publications. This research approach allows us to gain insights to the implicit concepts and assumptions underlying IASB's measurement prescriptions, as distinct from the concepts explicitly presented in the *CFED*

(Barker and McGeachin, 2015; Bougen and Young 2012). It allows us to problematise the translation or gap (Huikku *et al.*, 2017; Robson *et al.*, 2017) between the standard-setter's formally proclaimed concepts, as in the *CFED*, and the nuanced measurement practices that it actually demands.

With these opposing frameworks – IASB's *CFED* and semiology's 'value constellation' – the paper's analysis offers two main insights. First, in contrast to previous interpretations (e.g., Barth and Landsman, 1995; Barth, 2006; Hodder *et al.*, 2013), the ultimate distinctive characteristic of entity-specific measurement is shown to be its syntagmatic sensitivity to the interrelation between items in the statement. Such reframing of the entity-specific avoids the frequently assumed (though contestable) dichotomy between allegedly present objective facts (market) and subjective estimation of the future (entity-specific). It accommodates a more realistic view that all measurements aim to be supported by externally-corroborated 'present' facts, and all unavoidably involve subjective forward-looking estimates. Secondly, the analysis shows the co-existence of market-based and entity-specific aspects in *FV* measurement of both financial and non-financial assets: *FV* is a two-dimensional constellation. The unsustainability of the *FV* market monism is reflected not only in the practitioner's tendencies or biases (Barker and Schulte, 2017; Huikku *et al.*, 2017), and it is not contingent upon the calculative power of specific markets. Rather, indeterminacy is an inherent property of the situation (Stark, 2009) and of the statement, which is reflected already in the standard-setter's own prescriptions.

The remainder of the paper is organised as follows. The next section introduces the *CFED*'s principles of current value measurement and portrays extant literature on the limits of the market paradigm in *FV* measurement. The

third section introduces semiology as an alternative value framework, and the fourth describes the paper's research design strategy. The fifth section proposes, through an analysis of IASB's prescriptions and a discussion of their implications, a reframing of the dividing line between entity-specific and market-based measurement. This reframing serves as a preliminary step to the ultimate task of this paper, covered in the analysis and discussion of the sixth section, to explicate and theorise the co-existence of market-based and entity-specific perspectives in *FV* and to consider its implications. The last section provides conclusions and limitations, and uses the proposed theorisation of *FV* to highlight an under-investigated dimension in the broader studies of valuation: to the current focus on (associative) classification of similarities and differences, the paper adds the (syntagmatic) sensitivity to the situated relation between value-bearers in the specific statement as a broader value category. It refines, in summary, the understanding of relationality of values within statements.

2. Extant literature and *CFED*: the limits of the debate on the limits of *FV*

2.1. *CFED*: maintaining the market perspective of *FV*; proposing scope criteria

For decades, IASB¹³ and FASB have been reluctant to address in their conceptual frameworks the issue of measurement beyond merely listing the various measurement bases used in different standards (Hines, 1991; Zijl and Whittington, 2006; Whittington, 2008, 2015a). It has been argued, that the "lack of concepts relating to measurement is a glaring hole in the Framework"

¹³ And its predecessor, the International Accounting Standards Committee (IASC).

(Barth, 2014, p. 332). The IASB's recent conceptual framework project is the first to address in a more systematic manner the issue of measurement, which is "one of the most controversial and sensitive issues in accounting" (Hoogervorst, 2015). It is therefore an important step in global accounting policy-making. Furthermore, even if one is suspicious of conceptual framework projects in terms of their usefulness or impact, the publication of the *CFED* may at least serve as a trigger to re-engage taken-for-granted assumptions (Robson and Young, 2009) in the operation of what is considered to be "perhaps the most powerful system of representation of social and economic life that exists today" (Miller and Power, 2013, p. 563). This paper uses this trigger to challenge one specific prevalent assumption: the characterisation of *FV* as a purely market measurement.

The *CFED* offers no paradigmatic shifts with respect to the overarching principles of the IASB's measurement regime. It codifies the 'calculative pragmatism' (Power, 2010) of a mixed measurement approach, and structures the familiar dichotomy between two measurement branches: *HC* and current value, while the latter is further split between *FV* and *VIU*. There are also no changes in terms of the characterisation of *FV*. It is defined, as in IFRS 13 (para. 9), as the price that would be received to sell an asset in an orderly transaction between market participants (*CFED*, 6.21). *VIU* is defined as the present value of cash flows that an entity expects to derive from the continuing use of an asset and from its ultimate disposal (6.34), which is generally in line with the definition in IAS 36 (para. 6). Within current value measurement, *FV* is the dominant approach while *VIU* is an exception that at present applies only to impairment (para. BC6.26).

The *CFED* formalises the fundamental dividing line between *FV* and *VIU*, where the former is exclusively market value, and the latter is exclusively entity-specific value. In fact, under the *CFED*, *FV* and *VIU* are shown to be almost identical: “In principle, value in use...reflect[s] the same factors as described for fair value”, except that *VIU* is “based on entity-specific assumptions instead of assumptions by market participants” (para. 6.35). The exclusivity of the market perspective in *FV* was assumed well before the publication of IFRS 13 in 2011. The introduction of *FV* measurement in various IASB standards during the early 2000s has been deemed to enhance the objectives and characteristics of financial reporting, with the increased preference to ‘decision-usefulness’ and ‘relevance’ over ‘stewardship’ and (the older version of) ‘reliability’ (e.g., Power, 2010, 2012; Young, 2006; Bougen and Young, 2012; Miller and Power, 2013). The *CFED* seems therefore to merely formalise what has already been taken for granted for two decades: *FV* is the ultimate manifestation of marketisation of financial accounting values (see Müller, 2014; Zhang and Andrew, 2014).

There is nevertheless one new aspect in this regard in the *CFED*, which relates to the scope of applicability of *FV*. The *CFED* provides for the first time the selection criteria according to which a specific measurement basis should be chosen. These criteria are based primarily on the qualitative characteristics of relevance and faithful representation (*CFED*, 6.48-6.52). In assessing relevance, the *CFED* requires to take into consideration two types of factors: one is the characteristics of the asset, and the other is “how that asset or liability contributes to the future cash flow. This will depend in part on the nature of the business activities conducted by the entity” (para. 6.54(a)). In this regard, the impact of other assets on the contribution of the measured asset to the firm is of significance:

For example, if a property is realised by sale, it will produce cash flows from that sale, but if a property is used in combination with other assets to produce goods and services, it will help produce cash flows from the sale of those goods and services (*CFED*, 6.54(a)).

The *CFED*'s second selection criterion is faithful representation, again with an emphasis on the interrelations between the firm's items:

When assets and liabilities are related in some way, using different measurement bases for those assets and liabilities can create a measurement inconsistency (an 'accounting mismatch'). Measurement inconsistencies can result in financial statements that do not faithfully represent the entity's financial position and financial performance (*CFED*, 6.58).

These two criteria require a broader view when selecting a measurement basis. To the characteristics of the asset on a stand-alone basis, one must add an entity-specific perspective that embeds the positioning of the asset in relation to the firm's other assets and liabilities. In this, the *CFED* implicitly adopts what was explicitly introduced a few years earlier in the limited context of financial instruments (IFRS 9; IASB, 2014) – the *CFED* generalises a business-model selection mechanism.

In the Basis for Conclusion (BCIN.31) the IASB explains that the term 'business-model' has not been used in the *CFED*, in light of the various meanings that are associated with this term by different organisations. However, the support for its underlying principle is clear: "financial statements can be made more relevant if the IASB considers...how an entity conducts its business activities" (IASB, 2013, para. 9.32). Further, "the IASB should consider how an asset contributes to future cash flows...when deciding on an appropriate measurement method" (para. 9.33). Both the asset's own characteristics and its relation with the firm's other items must be taken into

consideration when determining the appropriate measurement basis (see a similar approach in EFRAG, 2013). They both determine the scope of applicability of *FV*.

2.2. The focus of the *FV* debate in current literature: the scope of *FV* and the *FV*-*HC* dichotomy

Notwithstanding the generally increasing attractiveness of *FV* in policy and academic discourse, its limits have also been discussed. The decisive issue in the IFRS *FV* debate, as depicted in Whittington's recent reviews (2015a,b), has been the extent to which the particular market is efficient. *FV* is frequently considered the best measurement basis "in the context of deep and liquid markets (the hallmark of the fair value view)" (Whittington, 2015b, p. 230); in other conditions – *FV* becomes more suspicious and the safe harbour of *HC* becomes necessary. The explicit or implicit critique of *FV* has focused on its appropriate scope of applicability, primarily as a derivative of market conditions (Hague, 2007; Alexander, 2007; Whittington, 2008). The concern with *FV* is therefore framed not as a conceptual issue, but rather as one of implementation:

In short, fair value accounting is a plus, implementation issues aside. However, historical cost accounting has features that provide an alternative should ideal fair value accounting not be attainable (Penman, 2007, p. 37).

In the same vein Whittington (2015a) summarised:

[*FV*] assumes that markets are efficient and sufficiently complete, deep and liquid to enable exit prices to be reliably measured or estimated. It also ignores transaction costs in measuring *FV*. Thus, the basis of *FV* thinking is a particular market setting that is an idealized version of that which exists even in advanced economies such as the US (p. 561).

This type of critique of *FV* with the resulting *FV-HC* trade-off has taken an even stronger hold during and after the great financial crisis, as “The ‘deep and liquid markets’ that had previously been seen to justify fair value measurement, particularly for financial instruments, had demonstrated an alarming degree of vulnerability” (Whittington 2015b, p. 231; see also in Laux and Leuz, 2009; Müller, 2014; Whittington 2015a).

A similar focus on the scope of applicability of *FV* is also evident in several recent proposals for mixed measurement selection criteria.¹⁴ Such proposals assume a different limitation in the applicability of *FV*: even in perfect markets, *FV* may not be appropriate in measuring an item if its contribution to the firm is a product of interrelation with other items. Three such proposals for measurement typologies have been offered by Linsmeier (2016), Marshall and Lennard (2016) and Nishikawa *et al.* (2016). In each of these proposals, factors such as transferability, business model, and convertibility to cash determine whether the measurement basis should be *FV* or *HC*.¹⁵ In each proposal, the sensitivity of the measurement to the asset’s interrelation with other items in the particular firm plays an important role, even if only implicitly. A similar approach has been taken by Botosan and Huffman (2015), which return to the distinction between ‘in-exchange assets’ that should be measured at *FV*, and ‘in-use assets’, which contribute to the firm by being used in combination with other assets and should be measured at *HC*. Penman (2007) perhaps captures best the essence of the critique of *FV* that is embedded in such proposals, by arguing that when the shareholder value is a product of a business plan and not mere fluctuations of markets, the minuses of *FV* “do add up” (p. 42). In the

¹⁴ In fact, the mixed measurement has been sometimes portrayed as a response to the limits of markets (Whittington, 2015a,b).

¹⁵ Or current cost in the case of Marshall and Lennard (2016).

context of business operations that interrelate resources to produce added-value, the purely market-based *FV* is insufficient, and therefore the default option of *HC* is applicable. The structure and logic of these recent proposals are therefore largely in line with the *CFED*'s business-model approach described above.

Another feature of these and previous proposals, which is also shared by the *CFED*, has been the exclusion of entity-specific measurement (*VIU*) in light of its association with subjectivity and the uncertainty underlying the estimation of future events. Common interpretations (e.g., Barth and Landsman, 1995; Barth, 2006; Hodder *et al.*, 2013; Whittington, 2015b) have viewed the entity-specific measurement as categorically inferior to market-based *FV*. The entity-specific perspective is assumed to be based on estimations of the specific management, as opposed to market estimations; it is assumed to be based on private information, as opposed to public information; and it takes into consideration the management's future plans and intentions, and thus is not limited to existing factual circumstances. The seemingly inferior entity-specific *VIU* has therefore been assigned a restricted role, i.e. impairment tests.¹⁶

To summarise, the focus of the debate on *FV* and its limits has been on the scope of its applicability, resulting in measurement selection criteria that contrast *FV* with the traditionally dominant *HC* on the one hand, and with the marginalised entity-specific *VIU* on the other hand. With this structure, the

¹⁶ The focus on the *FV-HC* dichotomy and the marginalisation of *VIU* have old roots. Littleton (1935), for example, views value-in-use as cost and value is only 'value-in-exchange' (pp. 270, 272). The category of current value which is not value-in-exchange does not exist.

nature of *FV* as a purely market-based value is taken for granted both by the IASB and in current literature.

2.3. *Expanding the problematisation of FV: from issues of scope to issues of characteristics*

The dichotomy between a market perspective and an entity-specific perspective has nevertheless been challenged in a few recent studies. Discussing the emergence of impairment techniques in the United Kingdom, Mennicken and Millo (2017) have highlighted the interrelation, rather than the contrast, between markets and organisations. They have shown how financialisation is not a one-way process, as management-oriented measurement still plays an important role. However, the context of this more nuanced understanding of financialisation in accounting measurement is very specific: impairment is a unique instance which involves both *FV* and *VIU* (the recoverable amount of an asset is the higher of its *FV* less cost of disposal and its *VIU*; IAS 36.6). Each of these two measurement bases, however, is characterised in a coherent manner. Similarly, Mennicken and Power (2015) have focused on the pluralism – or dissonance and plasticity – of valuation in light of the emergence of *FV*. They have attended to moments in the historical development of IASB when *FV* has been more or less imperialistic. Their main interest has been, similarly, on the (changing) scope of applicability of *FV*.

The study by Huikku *et al.* (2017) also addresses, in common with Mennicken and Millo (2017), the specific case of impairment, but from an empirical perspective of the actual valuation practices of those involved in the preparation of financial statements. Such practices have been shown to resist the strict taken-for-granted market/entity typology. Though one might have

expected a clear manifestation of an entity-specific perspective in applying the impairment tests, the study shows that those involved in the production of the statements could not avoid 'looking elsewhere' to markets and to historical and contemporary benchmarks. The calculation of goodwill impairment has been "much more average than it would be expected given the promises of IFRS" (p. 78).

The study by Barker and Schulte (2017) provides a complementary perspective to that of Mennicken and Millo (2017) and Huikku *et al.* (2017). It shows how in certain cases of operative non-financial assets, the proclaimed market-perspective of *FV* cannot be fully implemented by preparers, who find it necessary to apply entity-specific assumptions. Preparers have difficulties even in clearly distinguishing the market perspective from the entity-specific perspective, especially in cases of assets that are used in combination with each other. The preparers' practices in applying IFRS 13 are found to be expedient, unstable and ultimately in contradiction with the market perspective proclaimed by the standard. Such practices have been "at odds with the fair value idea that is wished-for in IFRS 13" (Barker and Schulte, 2017, p. 56).

No less interesting than the illustration of practitioners' deviation from IASB's proclaimed themes, these studies provide evidence of seemingly contradictory trends. In cases where market-based *FV* is required, entity-specific aspects are nevertheless taken into account (Barker and Schulte, 2017); in cases where entity-specific *VIU* is required, market aspects are nevertheless involved (Huikku *et al.*, 2017). In the following sections, a way of reconciling these trends is offered, by explicating and theorising the undermining of the assumed contradiction between the market-based and entity-specific perspectives. By reformulating the relation between these two perspectives as

a relation of complementarity rather than contradiction, the unsustainability of a pure market paradigm within *FV* will be surfaced. To do this, the study employs a value framework that is located outside the conventional disciplinary resources of financial accounting research.

3. Theoretical framework beyond economics: semiology's value constellation

3.1. Value outside the market paradigm

In his recent review of half a century of research in financial accounting measurement, Whittington (2015a) discusses the shift in the focus of academic research away from conceptual debates on value measurement, and argues that one of the reasons for this shift has been the realisation that “in a realistic economic environment, characterised by imperfect and incomplete markets, income and similar ideal economic summary measures are ill-defined” (p. 557). However, while the focus of research has turned away from conceptual debates, which were deemed to be based on unrealistic assumptions, the same assumptions have become prevalent in standard-setting, as the role of financial economics has only increased in the *FV* era (Power, 2010, 2012).

If indeed the exclusive reliance on the ideal and restrictive assumptions of financial economics has been the Achilles Heel of the ‘normative’ tradition – if indeed we cannot ignore the myth(s) of rationality (Macve, 2015) – a way forward may be the use of broader and less restrictive disciplinary lenses. Perhaps this is the context in which one can read Barth's (2015) recent call for enhancing interdisciplinary perspectives in financial accounting:

There are clear benefits of accounting research embracing individuals from different fields [different from economics, finance and psychology referred to earlier in the paragraph] with relevant, complementary expertise and knowledge. Broader and new perspectives can rejuvenate a field and enrich it (p. 504).

Semiology, the following analysis will show, is one such useful 'broader and new perspective'.

Semiology has been dually defined by Saussure as a framework to study social sign systems (*Course*, p. 16) and as a discipline of co-systemic values (*Writings*, p. 238); in fact, it reframes signs as values. Although his focus has been in the realm of language, Saussure had envisioned a broader framework, and indeed his tradition has been influential well beyond linguistics. This, for example, is how Graeber (2002, pp. 1-2) begins his theory of value:

There are, one might say, three large streams of thought that converge in the present term ['value']. These are:

1. "values" in the sociological sense: conceptions of what is ultimately good, proper, or desirable in human life
2. "value" in the economic sense: the degree to which objects are desired, particularly, as measured by how much others are willing to give up to get them
3. "value" in the linguistic sense, which goes back to the structural linguistics of Ferdinand de Saussure (1966) [i.e., the *Course*], and might be most simply glossed as "meaningful difference".

Saussure's theory, presented below, should therefore not be a surprising choice when one is looking for an alternative value framework (i.e., alternative to the economic framework referred to in Graeber's second category). Furthermore, while semiology's direct and indirect successors (especially

structuralism) have been applied throughout the social sciences, its applicability is particularly meaningful in the narrow realm of *purposeful* social sign systems (*Writings*, p. 154; Barthes, 1968, p. 41): in language and, this paper argues, in financial accounting. The use of semiology highlights the characteristics of accounting as a very particular social phenomenon: a signifying technology designed to produce and communicate statements comprising multiple value-bearers (e.g., assets and liabilities).

3.2. The two irreducible relations of semiology's value constellation

Saussure's argument begins with the inadequacy of theorising language signs as founded on an intrinsic relation between an expression ('signifier') and a concept ('signified'). Signs in semiological systems are not pre-delimited objects; they have no pre-defined substance (*Writings*, pp. 51, 136-7; *Course*, p. 122). Semiological elements are a product of oppositions, differences, and generally: relations. These are non-material and non-substantive (*Course*, pp. 7, 10, 122; *Writings*, pp. 102, 149). To capture the relational nature of the semiological element, Saussure introduces the notion of semiological value:

It must be accepted however that value expresses better than any other word the essence of this concept, which is also the essence of the language system (*langue*) itself, namely that a form does not have meaning but has value: that is the crucial point. It has value, hence it implies the existence of other values (*Writings*, p. 12).

Value is therefore a response to the lack of substance, to the inoperability of 'meaning', to the arbitrariness of the sign (Barthes, 1968, 1994).

Importantly, semiological value is relational in two different axes simultaneously (*Writings*, pp. 21, 39-40): the associative and syntagmatic axes. In the associative axis, elements in the sign system are grouped (associated)

into categories sharing a common feature. The differentiation principle is paramount in this axis, as the value of an element is firstly based on its similarity with and difference from other 'adjacent' elements. The syntagmatic axis focuses on the positioning of the element in the broader statement – on the co-presence of other elements in the statement. The semiological value is therefore defined in negative terms (*Writings*, pp. 51, 153), as a product of relation with other values: other values in the system, from which it is differentiated, and other values in the statement, with which it is interrelated (*Writings*, p. 60). It is no more than "the center of constellation; it is the point of convergence of an indefinite number of co-ordinated terms" (*Course*, p. 126). Lacking pre-determined substance, the semiological value is the mere *assemblage* of other terms 'around it', *in praesentia* – the syntagmatic axis, and *in absentia* – the associative axis (Saussure, 1993, p. 136; Barthes, 1968, pp. 58-9; Joseph, 2012, p. 597).

Although the internal relation between a 'signifier' and a 'signified' is neither natural nor rational, meaning is not completely abandoned. It is rather acknowledged as untenable. In sign systems, there are both 'exchange' and 'comparison' (*Course*, pp. 115-116):

If we consider on one hand the exchangeable, and on the other the co-systematic terms, no relationship is perceptible. The role of value is to relate these two things. It relates them in a way which defeats the mind (*Writings*, p. 239).

The semiological value may therefore be portrayed as comprised of three axes: one of which is ideal (the meaning, signifier-signified relation), and two that are pragmatic (the associative and syntagmatic). The former can only be aimed at indirectly through the latter.

A central point here is that the pragmatic relationality of value to other values is two dimensional. The semiological value is not merely a product of the general system, but is rather situated in a particular statement. This component has been frequently neglected in the transition from Saussure's original semiology, applicable only to purposeful sign systems, to the broader structuralism. Graeber's (2002) definition (quoted above) of Saussure's value as "meaningful difference" is illustrative of the structuralist tradition, that had put emphasis on classification (of the associative axis) while neglecting the situatedness (of the syntagmatic axis).

This impaired version of Saussure's value framework has also been evidenced in the accounting literature. Tinker (1991) refers to Saussure to offer an alternative value framework, in order to contrast it with an intrinsic-representational notion of value. It is, in this regard, similar to Thompson's (1987) theory of accounting calculation, which he also substantiates by analogy to language. Each of these proposals offers a relational framework for value in accounting, but in a manner that overlooks a critical component: the syntagmatic situation. Their critique – value is relational rather than intrinsic – is valid but partial. Their relationality remains in the associative axis, i.e. in the level of the system (the market). In that, they lose sight of an important characteristic of accounting, which, as will be discussed below, is at the heart of limits of the market rule when applied to financial reporting.¹⁷

¹⁷ Saussure's semiology (as drawn from his influential *Course*) has been acknowledged in the accounting literature as relevant for analysing *textual* (narrative) parts of corporate reports or particular terminology used in accounting standards (e.g. Walton, 1993; Parker, 1994; Evans, 2004; Davison, 2008). The current study, on the other hand, aims to harness Saussure's theory (drawn from both his *Course* and his *Writings*) in conceptualising the *numerical* signs that comprise the core financial statements (specifically the value of assets in the statement of financial position). In

Semiology's value framework stands therefore in fundamental opposition to that of the *CFED*. While the latter is based on an output dichotomy between market-based *FV* and entity-specific *VIU*, the former depicts a value that is a product of complementary inputs: the system-based associative relation and the statement-based syntagmatic relation. Armed with these contrasting alternatives, the paper now turns to assessing the IASB's prescriptions of *FV* and *VIU* measurement practices.

4. Research design: exposing implicit concepts from prescribed practices

Qualitative studies of financial accounting practices are "rare in the literature" (Huikku *et al.*, 2017, p. 79). It has been recently suggested that such studies may be broadened by directing attention to the gaps, discrepancies or 'translations' between the accounting standards issued by policy makers and the actual practices of those involved in the production of financial statements (Huikku *et al.*, 2017, p. 69; see also Cooper and Robson, 2006; Robson and Young, 2009). Concurrent with such an approach, emphasis should be placed on the messy "rhythms of production: from places where standards are written to places where standards are interpreted, translated and applied to produce accounts" (Robson *et al.*, 2017, p. 37).

This paper applies a similar research strategy to a different translation or gap: that between the standard-setter's formally proclaimed concepts – specifically the concept of market exclusivity in *FV* in the *CFED* and IFRS 13.2 – and the actual detailed measurement practices that it prescribes in its standards and

that sense, the current study advances a non-linguistic semiology: a financial-numeric semiology.

other guidance. Such a focus on the gaps and inconsistencies within the standard-setter's own publications has been recently employed as a research strategy in Barker and McGeachin's (2015) study of conservatism in IFRS:

By looking at the accounting practices required or proposed, we move from the abstract conceptualization (and rejection) of conservatism in the Framework to the reality of defining principles and creating rules to be applied in practice; in short, we move from, on the one hand, the IASB's rationalization of what it asserts it should be trying to do to, on the other hand, what the IASB is actually doing (pp. 183-4).

Paying attention to the translation between the standard-setter's proclaimed concepts, as in the *CFED*, and its prescribed measurement techniques is important, because it highlights the fragility and multiplicity within the realm of the standard-setter's own products. Such a research strategy provides a more nuanced insight into what would otherwise seem coherent. Specifically in this paper, such a strategy provides a more refined understanding of the IASB's seemingly homogeneous perspective – the market perspective – in *FV* measurement.

Semiology's theoretical framework provides a fundamentally different alternative to the IASB's conceptual framework with respect to the specific issue in matter, and it can be useful in challenging it. The paper's research approach has therefore two main interrelated pillars: a systematic review of relevant accounting standards, guidance and ancillary publications (Barker and McGeachin, 2015), and the use of an alternative theoretical lens as a 'conceptual tool' (Bougen and Young, 2012). Attending to the prescribed practices (Mennicken and Millo, 2017) while using a different theoretical lens facilitates the objective of gaining insight to the *implicit*, rather than official, concepts underlying IASB's measurement regime (see also Barker, 2015). This

is especially important in cases of ‘persistent troubling issues’ to which the standard setter is aware but is constrained from fully admitting (Bougen and Young, 2012, p. 391).

The empirical core of this study comprises IASB standards and accompanying guidance documents such as bases for conclusions, application guidance and illustrative examples (for the use of standards and modification to standards as empirical evidence, see Barker and McGeachin, 2015; Bougen and Young, 2012). Specifically, the study focuses on those standards addressing the two sub-categories of current value measurement: *FV* and *VIU*. IFRS 13 offers valuation techniques which are applicable when other standards require or permit *FV* measurement (paras. 1, 5). IAS 36 outlines how to determine *VIU* as a measurement basis for the recoverable amount in the context of impairment testing (*CFED*, BC6.26). These two key standards, with their ancillary publications, were systematically analysed. Together, they provide a comprehensive account as to how – as opposed to when – current value of (financial and non-financial) assets should be measured according to IASB.¹⁸ To clarify, the object of enquiry here is the products, rather than the process, of standard-setting (see e.g. Young and Williams, 2010). The paper’s concern is not with what is being argued about the nature of *FV* (in which case interviews with individual standard setters or due-process documentation might have been relevant). Rather, it is about how *FV* is reflected in the actual

¹⁸ It should be noted that IAS 36 and IFRS 13 have been enacted in different periods, and in fact by different standard-setters: IAS 36 has been originally enacted by IASC in 1998, while IFRS 13 has been originally developed by IASB and finally issued in 2011. However, the purpose of this paper is not to compare them or their standard-setting process. Furthermore, IAS 36 is still in force under the IASB regime and it governs the only situation that currently requires the application of entity-specific *VIU*, i.e. in impairment of assets measured in historical cost (*CFED*, BC6.25).

practices prescribed in the IASB's guidance that is advanced for the use of the preparers and auditors of financial statements.

5. Reframing the dividing line between market-based and entity-specific measurements

The discussion so far has presented the *CFED*'s framing, generally shared by the extant literature, of two contradictory 'pure' value outcomes, where *FV* is exclusively market-based and *VIU* is exclusively entity-specific. It has also presented semiology's alternative value framework of two complementary inputs, system-based and statement-based, constituting one heterogeneous value. Before assessing the extent to which IASB's *FV* measurement prescriptions fit any of these two opposing frameworks, the current section re-engages with a preliminary question: what is the dividing characteristic between market-based and entity-specific measurements?

5.1. Analysis: entity-specific and market-based measurements through the semiological lens

5.1.1. Market measurement as a one-dimensional associative constellation

FV is a difference-based measurement: it is anchored in prices of comparable assets in a relevant market, adjusted to reflect relevant differences. The measurement prescriptions under the *FV* hierarchy (IFRS 13, 72-90, B35-6) are a clear manifestation of this principle. If active markets exist for identical assets, there is no need for adjustments: level 1 inputs are "unadjusted" evidence (paras. 76-77). In the less trivial cases, i.e., in level 2 inputs, the measurement process starts with a market benchmark, i.e. with "quoted prices for similar assets" (para. 82(a)), which then must be adjusted to account for

factors specific to the measured asset, such as its location or physical condition (para. 83). A similar rationale for adjustment, to both cash flows and discount rates, applies where unobservable inputs must be used in model-type techniques under level 3 inputs (see paras. 88, B18-19, B23-30, BC145-146).

FV measurement under the three input levels is therefore a process of comparison and adjustment with the market (perfect, imperfect or hypothetical market). As presented in section 3, this is the principle underlying the associative axis. A value is a product of comparison with – of similarity with and difference from – other ‘adjacent’ values. *Figure 2*, reproduced from the *Course*, illustrates this principle: the value of the French word ‘*enseignement*’ (teaching) is a constellation of other words that have some common factor with it, such as the verbs ‘*enseigner*’ (teach) or ‘*enseignons*’ (we teach), the similar nouns ‘*apprentissage*’ and ‘*éducation*’ (education), and words that share a similar form (in this case a common suffix) while having a completely different meaning, such as ‘*changement*’ or ‘*armement*’.

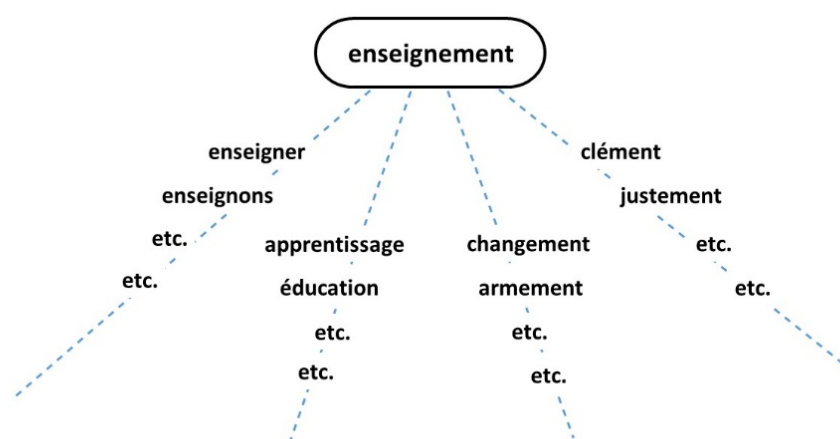


Figure 2: The associative axis constellation
(reproduced from: Saussure (2011 [1916]), p. 126)

Similarly, the value of a certain item measured under IFRS 13 would be a product of a constellation of other similar market-priced items. For example, the value of a used and installed Property Plant & Equipment (PPE) machinery would be determined based on the value of other items that share certain factors but differ in others, such as an identical machinery that is new rather than used, or an identical used machinery that is uninstalled (and see the similar examples in IFRS 13, paras IE11-IE14). The overarching principle of *FV* is of similarity and difference: it is therefore a manifestation of semiology's associative axis.

In its anchoring in similarity and differentiation, *FV* measurement is not different from other valuation practices. The role of comparability has been paramount in various domains of calculative practices, whether in securities markets (e.g., Zuckerman, 1999; Beunza and Garud, 2007; Sjögren *et al.*, 2017), in markets more broadly (e.g., Callon and Muniesa, 2005; Beckert and Musselin, 2013), or generally in organisational (and not necessarily market) settings (e.g., Espeland and Stevens, 1998; Lamont, 2012). Conceptualising *FV* measurement of assets in IFRS-based financial statements through semiology's associative axis is compatible with this broadly applied approach. However, there is another, more distinctive, dimension to the valuation of items within statements – of assets in financial statements: this is the syntagmatic dimension. This distinctive dimension and its implications will be the focus of attention of the following sections.

5.1.2. Entity-specific measurement as a two-dimensional constellation: adding the syntagmatic axis

The *CFED* formalises the fundamental distinction between “entity-specific assumptions” and “assumptions by market participants” (para. 6.35). But, what do entity-specific assumptions mean, and what makes these different from market assumptions?

The extant literature reviewed in section 2.2 has portrayed the entity-specific perspective – in contradiction to the market perspective – as one which is grounded in estimations of the specific management as opposed to market estimations, which is based on private information as opposed to public information, and which takes into consideration the management’s future plans and intentions rather than being restricted to present factual circumstances. The analysis below points, however, to a different and less loaded distinction.

In its 2011 revision, IAS 36 was amended to include the following new section:

Fair value differs from value in use. Fair value reflects the assumptions market participants would use when pricing the asset. In contrast, value in use reflects the effects of factors that may be specific to the entity and not applicable to entities in general. For example, fair value does not reflect any of the following factors to the extent that they would not be generally available to market participants: (a) additional value derived from the grouping of assets (such as the creation of a portfolio of investment properties in different locations); (b) synergies between the asset being measured and other assets; (c) legal rights or legal restrictions that are specific only to the current owner of the asset; and (d) tax benefits or tax burdens that are specific to the current owner of the asset (IAS 36.53A).

An entity-specific perspective is translated here as a perspective that is sensitive to the asset's relation with other assets in the entity. This is explicitly evidenced in sub-paragraphs (a) and (b), which discuss the value effects of "grouping of assets" and synergies. It is implicitly evidenced also in sub-paragraphs (c) and (d), as regulatory and tax aspects that "are specific only to the current owner" are impacted by the characteristics of the entity as a whole, with its other assets. They depend on the firm; not merely on the asset. Note that paragraph 53A does not refer to the identity of the estimator (management or market), the type of information used (private or public) or the question of plans versus existing factual circumstances.

Furthermore, a close reading of IAS 36 and its application guidance shows that *VIU* techniques and assumptions, just as those of *FV*, prefer public over private data (para. 33(a)), future improvement plans that are not anchored in existing circumstances must be disregarded (paras. IN8, 33(b), 44-5), and management estimations must be adjusted to those of the market. For example, in calculating an asset's *VIU*, "other factors, such as liquidity" will be taken into consideration only if they would be reflected in the pricing of market participants (paras. 30(e), A1). If comparable assets can be observed in the market, the expected cash flow should be consistent with the market's expectations (paras. A5-6).

Similarly, the discount rate used for capitalising the *VIU* cash flow shall reflect the "current market assessments" of the time value of money and the asset's specific risks (paras. 55, 56, BCZ53-4). Under the application guidance, even when an asset-specific rate is not directly available from the market and the entity needs to use surrogates, the purpose is:

to estimate, as far as possible, a market assessment of

- (a) the time value of money for the periods until the end of the asset's useful life; and
- (b) factors (b), (d) and (e) described in paragraph A1, to the extent those factors have not caused adjustments in arriving at estimated cash flows (para. A16).

Even if the starting point of calculating the discount rate is the entity's weighted average cost of capital (WACC) and its incremental borrowing rate, "these rates must be adjusted: (a) to reflect the way that the market would assess the specific risks associated with the asset's estimated cash flows" (para. A18). All relevant factors that must be taken into consideration in determining both the estimated cash flow and its discount rate, are to be based on market assumptions.

This terminology and way of reasoning is usually associated with *FV*, but, in fact, is applicable here to the entity-specific *VIU*. The *VIU* measurement process is not different from that of *FV*, in that it is based on adjustment to cash flows and discount rates of comparable, market-priced, assets. The factors to be taken into consideration in the *VIU* measurement (IAS 36, 30-32, Appendix A) are the same factors that are used in measuring *FV* (IFRS 13, B13; *CFED*, 6.35) and they aim at the same rationale – a difference-based analysis.

The remaining distinctive characteristic between the market-based and the entity-specific perspectives is one: it is the sensitivity to the interrelation of the measured asset with the entity's other assets and liabilities. Such sensitivity is lacking from market-based measurement and is present in entity-specific measurement. In semiology's terms, if market-based measurement is a one-dimensional associative constellation of other values, entity-specific measurement is a two-dimensional constellation of values on both the

associative and syntagmatic axes. The complementarity of the two-dimensional constellation is illustrated in *Figure 3* below. The horizontal axis represents the associative relation, whereby the value of the PPE item (textile machinery) is a product of its comparability (similarity and difference) with similar market-priced assets. The vertical axis represents the syntagmatic relation, whereby the item's value is also (simultaneously) a product of its interrelation with other assets in the specific entity. Intangible assets, such as patents, may for example impact the contribution of the PPE machinery to the firm's operations and earnings.

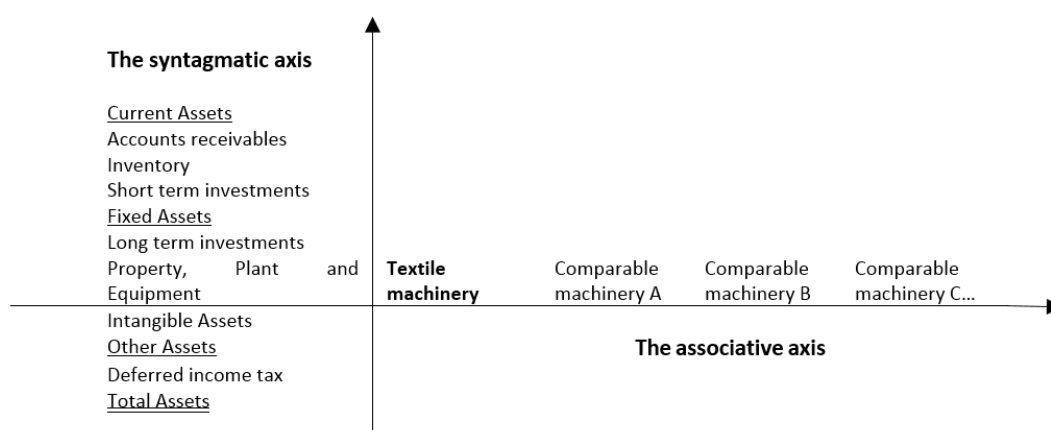


Figure 3: Value constellation illustrated in a statement of financial position

5.2. Discussion and implications: 'entity-specific' beyond the future/present and subjective/objective divides

The above framing of the distinction between market-based and entity-specific measurements in terms of syntagmatic sensitivity to other items in the

financial statement deviates from current economics-based theorisations of the market/entity-specific dichotomy, with significant implications.

Barth and Landsman (1995) explain that entity-specific *VIU* “can provide estimates of the value of intangible assets arising from management skill – a dimension which includes private information, asset synergies and options, including growth options” (p. 99). Synergy, i.e. the added-value of interrelation between assets, is indeed included as a distinctive character, but only as one component of a broader argument about the entity-specific perspective being oriented towards the future, with a clear subjective dimension: “Estimation is often difficult for value-in-use because it involves, e.g., prediction of future cash flows, selection of an appropriate discount rate, and knowledge of asset synergies” (pp. 100-1). Hodder *et al.* (2013) emphasise similar distinctions that derive from the management’s particular plans and intentions (p. 169), its “superior skill and foresight” and its anticipated “above market returns” (pp. 167-8; see also Whittington, 2015b, and similarly in earlier characterisations of entity-specific cash flow such as in Sterling, 1979, pp. 127-138).

But the strict dichotomy between ‘present’ objective facts (*FV*) and future subjective estimations (*VIU*) is susceptible to criticism. All measurements aim to be supported by externally-corroborated facts, and all unavoidably involve subjective forward-looking estimates. As Penman (2007) asserts, “any accounting beyond mere cash accounting involves estimates” (p. 41). In fact, Barth dedicates a paper (2006) to arguing that the future is embedded within all measurements: “This is not surprising because, by definition, assets and liabilities embody expected future inflows and outflows of economic benefits” (pp. 271-2). But as Barth is using this fundamental insight to argue against the

exclusion of *FV* when compared to *HC*, she excludes the entity-specific *VIU* on similar grounds (e.g., p. 281). This is also the approach taken by Hodder *et al.* (2013), as they defend *FV* with the argument that subjective judgment of management is an unavoidable feature of financial reporting “even within the confines of historical cost measurement” (p. 177-8), but dismiss *VIU* as it is based on management anticipation regarding future events (pp. 167-169, 230-1). The subjective judgment inherent in accounting measurement and the orientation to the future are used inconsistently by Barth (2006) and Hodder *et al.* (2013) as both an argument for *FV* and against *VIU*.

These views are refined with a further argument about the nature of the discount rate to be used in each of the measurement perspectives. Entity-specific value, argues Barth (2006), “requires including expectations of future cash flows that the entity expects to receive, discounted at a rate that reflects the entity’s cost of capital, even if these differ from those of other entities” (p. 273). Discussing the same issue, Hodder *et al.* (2013, p. 167) argue that “The value-in-use measurement basis is silent as to the discount rate to be used in measuring the asset”. However, the analysis above has shown, that even for the entity-specific *VIU*, the discount rate should be based on market assessments. The discount rate (or cost of capital) is therefore also excluded as a distinctive characteristic: *FV* and *VIU* share the same discounting assumptions – those of the market.

Furthermore, the difference in the definitions of *FV* and *VIU* cannot sustain the present/future distinction. Indeed, while *VIU* is defined in future-oriented terms of expected cash flow (*CFED*, 6.34; *IAS* 36.6), *FV* is defined in terms oriented to the present, i.e. to prices in existing markets as of the measurement date (*CFED*, 6.21; *IFRS* 13.9). However, notwithstanding these terminological

differences in the definitions, the actual *FV* measurement practices prescribed by IASB are just as much future-oriented and cash flow-based as are those of *VIU*. The characterisation of *FV* is in fact dual, as in addition to the definition which is based on present circumstances (prices), it must reflect the “estimates of future cash flows” and the various factors that may impact the assessment of such future cash flows (*CFED*, 6.23; and see also in *CFED*, Appendix A and IFRS 13.B13).

This dual characterisation of *FV* resonates with semiology’s dual definition of value. As presented in section 3.2, in semiology’s framework we have both the meaning (‘exchange relation’), which is an intrinsic and therefore only ideal relation, and the pragmatic and operational ‘co-systemic’ relations on the associative and syntagmatic axes. The former is only aimed at indirectly through the two latter; they are related “in a way which defeats the mind” (*Writings*, p. 239). The asset value in financial statements is no different, as future and present go hand in hand in all accounting measurement. As Huikku *et al.* (2017, p. 77) show, “traces about the past...frame the future”. This temporal duality is at the core of the uncertainty involved in valuation: “Note that uncertainty exists now, with respect to amounts and timings of cash flows that do not yet exist. The challenge for accounting is to capture and structure currently available data (an input) in order to help mitigate the problem of uncertainty with respect to forecasting (an output)” (Barker and Penman, 2016, footnote 6). The intrinsic future-oriented value is never directly approachable – it is only indirectly interrogated in the present (see Quattrone, 2016a).

The important point here is that the conventional hierarchical dichotomies, which have been used to portray *FV* – but not *VIU* – as objective and factual (in the historical context of its legitimation vis-à-vis *HC*), are not supported by

the IASB's actual measurement prescriptions. If all measurements are dual both in their temporality (future/present) and their epistemological orientation (subjective/objective) we are left with a much less loaded distinguishing feature for entity-specific measurement: its syntagmatic sensitivity to interrelations with other value-bearers in the particular statement (firm) as a broader value category.

6. The intrinsic limits of accounting financialisation: *FV*'s two-dimensional constellation

6.1. Analysis: the presence of entity-specific aspects in *FV* measurement

If, as clearly proclaimed in IFRS 13.2 and the *CFED*, *FV* is not entity-specific, and if the distinct characteristic of an entity-specific perspective is the sensitivity to the asset's interrelations with other assets and liabilities in the entity, then in *FV* measurement an asset should be measured on a stand-alone basis. As Barth (2006, p. 275) emphasises: "Fair values are comparable because the fair value of any particular asset or liability depends only on the characteristics of the asset or the liability, not the characteristics of the entity that holds the asset or liability". This disentanglement from the unique situation in favour of generic calculative comparability is an important characteristic of marketisation (Callon, 1998).

The recent introduction and generalisation of the business-model approach, presented in section 2.1, does not seem to prejudice this view of *FV* as a stand-alone measurement. Although for the purpose of measurement selection criteria the situational circumstances of the asset in the specific entity are consequential, such circumstances do not play a role in the *FV* (or *HC*) measurement *per se*. If the stand-alone assessment of the asset seems

insufficient – "for example...if a property is used in combination with other assets to produce goods and services" (6.54(a)) – then *FV* would be considered inappropriate and a retreat to the *HC* default would seem unavoidable. If, on the other hand, *FV* is chosen, entity-specific considerations should be excluded in the actual measurement of the asset. This approach is shared by the recent measurement typology proposals discussed in section 2.2. They all limit the problematisation of *FV* to issues of scope of applicability. The nature of *FV* itself – its non-entity-specific characterisation – is not challenged. However, the following analysis of IASB's measurement prescriptions undermines this taken-for-granted assumption with respect to both financial and non-financial assets.

6.1.1. FV measurement of non-financial assets

The entity-specific perspective is embedded into *FV*, firstly, through the introduction of the three valuation techniques (or 'valuation approaches'). In addition to the market approach, IFRS 13 includes the cost approach and the income approach, although the standard proclaims that all three techniques aim to the same rationale: "The objective of using a valuation technique is to estimate the price at which an orderly transaction to sell the asset... would take place between market participants at the measurement date under current market conditions" (para. 62). While the standard is succinct about the three valuation techniques, the underlying issue becomes clearer in the application guidance and basis for conclusions. Under the application guidance, the market approach is not sufficient where assets are interrelated with one another:

In many cases the current replacement cost method is used to measure the fair value of tangible assets that are used in combination with other assets or with other assets and liabilities (IFRS 13.B9).

Similarly, the introduction of the 'valuation premise for non-financial assets' incorporates the entity-specific perspective for cases in which the asset is used "in combination with other assets as a group" (para. 31(a)). The basis for conclusions expands the discussion on this situation of "specialised non-financial assets that have a significant value when used together with other non-financial assets, for example in a production process" (IFRS 13.BC78). In such cases, the IASB acknowledges that the market price cannot capture the asset's current value. It also acknowledges the reason for that – market value lacks the sensitivity to other assets in the particular entity. And so it goes:

When a market price does not capture the characteristics of the asset (eg if that price represents the use of the asset on a stand-alone basis, not installed or otherwise configured to use, rather than in combination with other assets, installed and configured for use), the price will not represent fair value. In such a situation, an entity will need to measure fair value using another valuation technique (such as an income approach) or the cost to replace or recreate the asset (such as a cost approach) depending on the circumstances and the information available (IFRS 13.BC79).

Note, that the need to go beyond market prices is not a derivative of, and is not otherwise related to, the specific market conditions. The limitations acknowledged here are intrinsic to a situation involving interrelation between items. In semiology's terms, this is the unavoidable impact of the syntagmatic axis.

The use of the terminology 'specialised assets' cannot relieve the fundamental inconsistency which is relevant to many business activities, where different resources are uniquely combined in order to produce value beyond the

aggregate value of each resource on a stand-alone basis. With respect to such a common – if not paradigmatic – business-model, there is a clear gap between the IASB's formal conceptualisation of a purely market-based *FV* and its actual measurement prescriptions. While conceptually, entity-specific aspects are excluded, such aspects must be taken into consideration in the actual measurement process prescribed by IFRS 13 and its ancillary guidance. The IASB's prescriptions therefore illustrate the complementarity of market and entity-specific considerations: *FV* is a two-dimensional value constellation (as illustrated in *Figure 3* above).

This fundamental gap between the high-level conceptualisation of *FV* and the IASB's more technical and nuanced measurement prescriptions is allegedly bridged through the 'highest and best use' assumption (IFRS 13, paras. 27-32). The hypothetical market participant is assumed to have the capacity to generate the highest value from the asset "through its use in combinations with other assets as a group" (para. 31(a)). According to the basis for conclusions:

In such situations, the scrap value for an individual asset would be irrelevant because the valuation premise assumes that the asset would be used in combination with other assets or with other assets and liabilities. Therefore, an exit price reflects the sale of the asset to a market participant that has, or can obtain, the complementary assets and the associated liabilities needed to use the specialised asset in its own operations. In effect, the market participant buyer steps into the shoes of the entity that holds that specialised asset (IFRS 13.BC78).

Under the highest and best use assumption, the potential purchaser – a market participant – is assumed to possess the “complementary assets and associated liabilities” (para. 31(a)(i)), and to use the asset with such other assets – or to sell it onwards to someone who would do exactly that (paras. 27, BC74-75). Other assets for this purpose are those “necessary for the asset to function”

(para. BC77), or those that are “needed to use the specialised asset in its [the purchaser’s] own operations” (para. BC78). A similar approach is taken in the application guidance: the market participant is assumed to have the ‘necessary complementary’ assets (para. B3).

The interrelation between assets – the core defining feature of an entity-specific measurement – is therefore artificially incorporated into the market-based *FV* measurement. The highest and best use assumption flattens the multiplicity of options to combine assets with one another, the heart of business creativity, to a simplistic and unrealistic picture of business life in which an asset has just one set of ‘necessary’ complementary assets. This intellectual acrobatics is further exemplified in the basis for conclusions:

The IASB concluded that an exit price of an asset or a liability embodies expectations about the future cash inflows and outflows associated with the asset or liability from the perspective of a market participant that holds the asset or owes the liability at the measurement date. An entity generates cash inflows from an asset by using the asset or by selling it. *Even if an entity intends to generate cash inflows from an asset by using it rather than by selling it, an exit price embodies expectations of cash flows arising from the use of the asset by selling it to a market participant that would use it in the same way.* That is because a market participant buyer will pay only for the benefits it expects to generate from the use (or sale) of the asset. Thus, the IASB concluded that an exit price is always a relevant definition of fair value for assets, regardless of whether an entity intends to use an asset or sell it (para. BC 39; italics added).

Instead of using the entity’s *VIU*, one must estimate a ‘market participant’s *VIU*’, which is a contradiction in terms. This is an attempt to portray situated values as a product of general markets prices.

6.1.2. *FV measurement of financial assets*

While the measurement consequences of interrelations between assets is an issue which is commonly associated with non-financial assets and especially Property, Plant and Equipment (e.g., Barker, 2015; Barker and Schulte, 2017), it is in fact consequential also in the context of financial assets, although to a different degree and scope. Here too, fractures are found in the conceptual principle that *FV* measurement excludes entity-specific aspects, i.e., the positioning of the financial asset within the particular entity with its other financial assets and liabilities (its entire securities portfolio). This is evident specifically in the case of financial assets and liabilities with offsetting positions in counterparty credit risks (IFRS 13, paras. 48-51, 56).

IFRS 13's basis for conclusions (paras. BC108-117) provides the background to this issue in the common practice of entities (especially in the financial sector) to hold and manage financial assets and financial liabilities on the basis of the entity's net exposure to a particular market risk or credit risk of a particular counterparty. A strict market-based approach would necessitate the measurement of each financial asset on a stand-alone basis, ignoring its positioning in the particular portfolio of the specific entity. However, the practice in the US and elsewhere has not been consistent on this issue:

When applying US GAAP, many entities applied the in-use valuation premise when measuring the fair value of such financial assets and financial liabilities. In other words, an entity would take into account how the fair value of each financial asset or financial liability might be affected by the combination of that asset or liability with other financial assets or financial liabilities held by the entity (IFRS 13.BC111).

As shown in section 5, such combination between assets is precisely the distinctive characteristic of an entity-specific measurement, and therefore is at

odds with a pure market-based *FV*. The IASB recognised that “using the in-exchange valuation premise was one of the more controversial proposals in the exposure draft”, as it ignored the management of assets and liabilities on a portfolio basis (para. BC114), which resulted in a divergence from internal risk management practices that were based on net exposure (para. BC115). Nevertheless, the IASB proclaimed to have rejected the in-use approach in favour of the in-exchange approach. The argument has been that:

The fair value of a financial asset reflects any benefits that market participants would derive from holding that asset within a diversified portfolio. An entity derives no incremental value from holding a financial asset within a portfolio (IFRS 13.BC112).

The clear market paradigm terminology has been further used:

An entity's net risk exposure is a function of the other financial instruments held by the entity and of the entity's risk preferences (both of which are entity-specific decisions and, thus, do not form part of a fair value measurement) (IFRS 13.BC117(b)).

Notwithstanding these declaratory statements, IFRS 13 ultimately provides a 'portfolio exception' that allows the measuring of a group of assets and liabilities on a net exposure basis, if the entity manages these securities on such basis with respect to exposures to market risks or credit risks of particular counterparties (paras. 48, BC118-9). There is again, as in the case of non-financial assets discussed above, a tension between the overarching principle of pure market-based *FV* and the nuanced measurement prescriptions that are sensitive to the situated entity-specific (portfolio-specific) positioning of the item.

Furthermore, similar to its introduction of the highest and best use assumption for non-financial assets, in the case of financial assets the IASB allegedly resolves the above tension – the market/entity-specific discrepancy – by assuming an ideal market-based interrelation between the measured item and the other securities in the portfolio. Therefore, while the entity's risk preference is acknowledged as not being part of the market pricing, the specific composition of the portfolio is reduced to a hypothetical market scenario:

However, the boards [IASB and FASB] understand that market participants holding that particular group of financial instruments and with those particular risk preferences would be likely to price those financial instruments similarly (ie using similar valuation techniques and similar market data). As a result, the market participants' measurement of those financial instruments within that particular group is a market-based measurement (IFRS 13.BC117(b)).

A similar manoeuvre is found in the actual standard, where the provision of the entity-specific portfolio exception is justified by a market-based hypothesis, with the resulting conclusion:

Accordingly, an entity shall measure the fair value of the group of financial assets and financial liabilities consistently with how market participants would price the net risk exposure at the measurement date (IFRS 13.48).

The entity-specific circumstances are being subjected to an imaginary market scenario, as the specific net exposure position is presented as if measured based on market pricing. However, this is as unrealistic as the highest and best use assumption. This is especially the case in the context of counterparty credit risks, as distinct from market risks. In the latter case, the risks are systematic, but in the former they are entity-specific. Credit risks are of the particular

counterparties that are included in the specific portfolio; they cannot be covered by generalised market assessments. This is, in fact, acknowledged by the IASB:

Because the bid-ask spread (which is the basis for making adjustments to an entity's exposure to market risk to arrive at the fair value of the net position) does not include adjustment to counterparty credit risk...the boards [IASB and FASB] decided to specify that an entity may take into account its net exposure to the credit risk of a particular counterparty when applying the exception (IFRS 13.BC124).

Indeed, reflecting the interrelations of the measured item with other items based on specific counterparty risks cannot be market-based. Similar to the case of non-financial assets, the IASB is juggling between a formal posture that excludes entity-specific considerations and actual prescriptions that embrace them.

6.1.3. The unsustainability of reducing situated interrelations to ideal market assumptions

The ideal market-based assumptions regarding hypothetical interrelation between assets – the highest and best use assumption and the market-perspective's net exposure assumption – are as unrealistic as a stand-alone assumption. Either the syntagmatic axis is prescribed with zero contribution to the item's value, or it is prescribed with an imaginary maximum contribution ('highest and best' complementarity). In both cases, the particularities of the actual situation are excluded. As Whittington (2010, p. 109) puts it, the notion of a market participant that is in the exact situation of the entity itself in terms of information and resources, "makes nonsense of the

idea that the resulting measure is non-entity specific”.¹⁹ It is not surprising therefore that IASB re-balances this fictitious assumption with a more pragmatic assumption – one can assume that the current use is actually the highest and best use, unless market or other factors suggest otherwise (IFRS 13, paras. 29, BC71).

The unsustainability of such an ideal conceptual bridge is clearly illustrated in the case of *IFRIC Update: IAS 41 Agriculture and IFRS 13 Fair Measurement* (March 2013). Under IAS 41 (IASB, 2003c), a biological asset shall be measured at *FV* less cost to sale (para. 12). However, as biological assets are often attached to land, there may be no separate market for them. In such a case, the standard prescribes a residual method, whereby "the fair value of raw land and land improvements may be deducted from the fair value of the combined assets to arrive at the fair value of biological assets" (para. 25). A clarification request was submitted to IASB's Interpretation Committee, with the concern that using the fair value of land would result in a minimal or nil fair value for the biological asset when the highest and best use of the land is different from its current use as a plant. After discussing the request during four meetings, the Interpretation Committee admitted that it could not provide an answer, and, furthermore, acknowledged that this question had implications well beyond IAS 41. Indeed, the issue goes to the heart of *FV* under IFRS 13:

The Interpretation Committee observed that, in the development of IFRS 13, the IASB considered the situation where the highest and best use of an asset in a group of assets is different from its current use. The

¹⁹ Though Whittington bases his argument on the lack of perfect markets, while this paper's argument, as discussed above, is not dependent on the market conditions. It should also be noted that Whittington endorses the notion of deprival value, which is more of "a method of choosing between measurement bases" (Whittington, 2015a, p. 566), while this paper's interest is in the *FV* measurement basis *per se*.

Interpretation Committee noted, however, that IFRS 13 does not explicitly address the accounting implications if those circumstances arise and the fair value measurement of the asset based on its highest and best use assumes that other assets in the group need to be converted or destroyed.

The Interpretation Committee also noted that this issue might not only affect the accounting for assets within the scope of IAS 41 but it could also affect the accounting for assets in the scope of other Standards. In the light of the analysis above, the Interpretation Committee observed that this issue is too broad for it to address and, accordingly, the Interpretation Committee directed the staff to ask the IASB to provide clarification of the accounting requirements for the issues considered by the Interpretation Committee.

The Board, in turn, decided not to address the issue, but rather to further defer its consideration to the post-implementation review of IFRS 13.²⁰ The issue is still outstanding at the time of writing, five years after the clarification was sought. The IASB's use of ideal market-based assumptions of unique interrelations would not resolve the fundamental issue: the specificity of interrelations is not generalisable.

6.2. Discussion and implications: the intrinsic irreducibility of the two dimensions of FV

The analysis above has illustrated the fracture of the market/entity-specific dichotomy within *FV* measurement, a dichotomy which has been generally taken for granted in the extant literature. Importantly, the analysis has anchored this fracture in the IASB's own guidance. The 'problem' is inherent to the accounting value, and it is not solely one of imperfect implementation

²⁰ The Board's decision from May 2013 is available at <http://archive.ifrs.org/Current-Projects/IASB-Projects/Agriculture-and-Fair-Value-Measurement/Project-News/Pages/IASB-Update-May-2013.aspx> (accessed September 18, 2017).

by preparers as seems to be suggested by Barker and Schulte (2017) and Huikku *et al.* (2017). This relocation and re-characterisation of the problematisation of the entity/market dichotomy allows, in fact, the reconciliation of these two studies, which have shown that the entity-specific perspective plays a role even in allegedly market-based measurement (Barker and Schulte, 2017) and that the market perspective plays a role even in allegedly entity-specific measurement (Huikku *et al.*, 2017). The boundary between the market and entity-specific measurements is blurred from both directions. The findings of each of the above studies are only seemingly paradoxical (Huikku *et al.*, 2017, p. 78), and their trends are only seemingly diverging. Both studies are, in effect, reconcilable through the two-dimensional value principle: values within statements – whether *FV* (for PPE) or *VIU* (in impairment) – have both associative (market) aspects and syntagmatic (entity-specific) aspects. IASB's own guidance – and not only preparers' behavioural tendencies – reflects this overarching principle.

The standard-setter's perspective investigated here therefore complements and generalises the insights gained from studies that have taken the perspective of standard-users. Indeed, studying “how accounting and audit decisions are made” (Cooper and Robson, 2006, p. 435) through “the *interpretation and implementation* of rules” (p. 428) is enlightening (see also Hatherly *et al.*, 2008; Robson *et al.*, 2017); but so is the study of the nuanced techniques prescribed by standard setters. One may even argue that a detailed and critical study of the standard-setter's prescriptions is a pre-condition to the study of their implementation by standard-users. At least, these are complementary approaches. Complementing the “interest in translations from financial standards into financial accounting practices” (Huikku *et al.*, 2017, p. 69), the analysis above points to the translation (gap) between the standard-

setter's proclaimed concepts (as in the *CFED* or the declaratory statement of IFRS 13.2) and the nuanced measurement techniques prescribed by it. Through such a focus, the paper shows how the IASB, not different in this regard from its American counterpart (Bougen and Young, 2012, p. 400), does not 'come clean' with its own prescribed practices, with respect to the consequential issue of the exclusivity of the market perspective in *FV*.

The characterisation of the IASB's implicit acknowledgement of the limits of market perspective as conceptual and not only empirical or contingent is important. Such a framing of the issue is in line with a broader understanding of the incapacity of calculative power to generalise indeterminate situations. As Stark (2009, p. 14) has argued, following Frank Knight and John Dewey:

The problem of uncertainty, it must be emphasized, is not a function of the limited calculative power of the human actors confronting it. Instead it is a property of the situation. The situation is indeterminate.

Similarly, the indeterminacy of the accounting value is not a matter of the calculative power of markets but rather a property of the statement and of business activities underlying it, where unique interrelations produce more (or less) than the mere aggregate of stand-alone resources. This is also what semiology emphasises in the context of values within statements, where the two-dimensional value constellation is irreducible to a one-dimensional constellation (Saussure, 1993, p. 133). Hence, the use of ideal assumptions – the highest and best use assumption and market-based net exposure assumption – could not have truly resolved the tension. The attempts to collapse the syntagmatic axis to the associative one are intrinsically untenable. Explicating this inherent, semiological, characteristic of accounting value, becomes an issue of advancing a more realistic, reflexive and ultimately

responsible conceptualisation of accounting measurement. It is particularly important in the current context, as calculability reaches new frontiers through an emerging data science, to acknowledge the incapacity of generalised market prices to fully capture the specificity of individual judgment, unique interrelations, and situated value constellations (see also Quattrone, 2016b).

These conceptual concerns are also translatable to a concrete and timely policy issue: business-model measurement, which, as briefly presented in section 2.1, has been officially introduced for financial instruments (IFRS 9 from 2014) and has been implicitly generalised in the *CFED* for all asset types. One of the main objections to the business-model approach has been the argument that it is based on subjective plans rather than objective facts. Such criticism is based on the assumption that 'business-model accounting' is equivalent to 'intent-based accounting' (as in the title of Leisenring *et al.*, 2012: "Business-model (intent)-based accounting"; and see also in Hodder *et al.*, 2013, p. 169). However, re-interpreted as sensitivity to other value-bearers in the statement (syntagmatic sensitivity), the entity-specific perspective underlying business-model accounting is not less factual, at least in principle, than market-based accounting. Business-model measurement is not intent-based measurement: it is 'merely' a situation-sensitive measurement. It does not require one to delve, or to pretend to delve, into the minds of corporations or individuals, but rather to look at the contextual situation.

The analysis and theorisation proposed here suggest that there is more to business-model measurement than what is explicitly presented in IFRS 9, the *CFED* and the recent academic proposals discussed in section 2.2. These have acknowledged the two irreducible dimensions of situated measurement, but have drawn the consequences from that irreducibility only at the level of

measurement *selection criteria*. This paper, on the other hand, has shown that the sensitivity to the interrelation between accounting items is found within IFRS 13's measurement prescriptions *per se*. It has shown – and proposes to explicate and generalise the principle – that entity-specific and the market perspectives complement each other in *FV*.

Conceptualising business-model measurement as fact-based rather than intent-based does not mean ignoring the role of judgment. Judgment is and must be acknowledged, but in this, business-model measurement is not *a priori* different from other measurement concepts. Discretion plays a fundamental role throughout the accounting process, and it therefore cannot be used, as such, to rule out the business-model approach or the entity-specific measurement. Acknowledging the limitations of the market paradigm need not result in going back to *HC*, which in any event does not solve the issue of sensitivity to interrelations. It does not need to result in marginalising the scope of *FV*, as has been frequently suggested. It requires, instead, to 'come clean' (Bougen and Young, 2012) with the role of the entity-specific syntagmatic axis alongside the market-based associative axis.

7. Conclusions

In order to challenge the taken-for-granted assumption about the exclusive market perspective of *FV* measurement, this paper has mobilised an analytical tool outside accounting's traditional disciplinary resources of economics and finance, i.e. semiology's value framework. This research approach is in line with the broader acknowledgment by thought leaders of even traditional research schools, that the exclusive reliance on economics and finance – and specifically their market assumptions – has restrained financial accounting

research. Hence, in their agenda-setting paper – '*Accounting Research; Where Now*', Jones and Wells (2015, p. 575) point to an odd situation in accounting research: "While hard-core support for the efficient market hypothesis has diminished in finance, and was never particularly strong in economics, it is still receiving strong support and endorsement from the leading accounting journals". Barth (2015) has been even more explicit about the potential of "broader and new perspectives" to "rejuvenate a field and enrich it" (p. 504). The current study has offered semiology as one such broader and new perspective in the theorisation of current value measurement. By stepping outside the boundaries of economics and finance, which is rare in the study of financial accounting measurement, the paper offers its general contribution to current accounting research.

With its semiological lens, this paper also offers two specific contributions to extant literature on value measurement and its market orientation. First, in contrast to previous interpretations, the paper proposes and substantiates a reinterpretation of the entity-specific/market divide in a manner that does not depend on the untenable distinction between present objective facts and forward-looking subjective judgment. In line with semiology, entity-specific is ultimately a sensitivity to the interrelation between the statement's items (the firm's resources), i.e. a sensitivity to the syntagmatic axis. Second, the paper exposes the unsustainability of *CFED*'s and *IFRS 13*'s proclaimed overarching principle, generally assumed also in the extant literature, that *FV* is purely market-based value and not an entity-specific value. The paper shows how it is both. The study thereby expands the boundaries of *FV* critique from the question of its appropriate scope of applicability, to the realm of its inherently complementary characteristics. It shifts attention from the contingent limits of markets to the inherent limits of the market paradigm.

Importantly, these contributions constitute neither a normative critique of how the market perspective of *FV should* be curbed nor a behavioural insight into how it is curbed in practice by the preparers of financial statements (Barker and Schulte, 2017; Huikku *et al.*, 2017). With its focus on the standard-setter's perspective, the paper rather explicates the implicit concepts of IASB's own existing measurement prescriptions. While other studies (e.g., Zhang and Andrew, 2014), have focused on the narrative of IASB's conceptual framework showing the increasing trend of financialisation in its rhetoric, this paper has taken the opposite approach of looking beyond the narrative and into the actual measurement prescriptions. From such a perspective, the paper has offered insights into the limits of financialisation. Ultimately, marketisation is curbed in IASB's *FV* measurement prescriptions – even if in an inconsistent, confusing and implicit manner – with implications to the currently debated issue of business-model measurement.

A fundamental limitation of the perspective adopted in this paper must be noted. The production of financial statements – with their items' values – is a multi-stage process, which involves the agency of different stakeholders and factors. Various acts of translation are involved in the process (Robson *et al.*, 2017). Semiology provides an insight to one layer of a multifaceted phenomenon. Indeed, recent 'valuation studies' have focused on the social situation in which practices of valuation take place in particular space and time settings (e.g., Muniesa, 2011; Hutter and Stark, 2015; Kornberger *et al.*, 2015). Semiology focuses on a different aspect (of a different order) of the value situation. However, as Mennicken and Millo (2017) and Vargha (2016) highlight, research on the socio-historical context of valuation should be supplemented with an attention to the accounting valuation technologies themselves, including models, concepts and infrastructures. In line with this

view, semiological analysis is complementary to, not a substitute for, sociological accounts of value production. As Roland Barthes emphasised: “Semiology, once its limits are settled, is not a metaphysical trap: it is a science among others, necessary but not sufficient” (1993, p. 112). Put differently: in a broader 'accounting constellation' (Burchell *et al.*, 1985), 'value constellation' is only one component, but, as shown above, it is a consequential one.

Finally, the specific case of *FV* as theorised here may serve as an illustration of a more general issue that requires attention in the broader studies of calculative practices (e.g., Miller and Napier, 1993) or valuation and evaluation practices (e.g., Lamont, 2012). As discussed in section 5.1.1, comparability and classification based on differentiation and similarity have played an important role in the extant literature's theorisation of valuation practices. Contemporary studies in accounting (e.g., Lorino *et al.*, 2017; Sjögren *et al.*, 2017) and beyond (e.g., Prato and Stark, 2017) continue to advance our understanding of the situatedness of valuation through relations of comparability and distinction. Such previous and contemporary studies have shown how an item's value is not merely a product of its own qualities (an intrinsic view of value) but is a product of its relation with (and positioning vis-à-vis) other elements in the system (e.g., the market). In semiology's terminology, these studies have added more and more layers in the theorisation of the associative dimension of value.

The case of *FV* presented in this paper, on the other hand, points to a complementary and under-investigated dimension of value: the syntagmatic sensitivity to the relation between value-bearers (e.g., assets) in a broader value category. The financial statement is an obvious, but not the only, manifestation of such broader value category encompassing interrelated

items. In the context of art valuation, for example, an artist's portfolio may also be considered as a broader value category. The insufficiency of benchmarking an art item to comparable items in the market has been acknowledged, as well as the value impact of other factors such as the artist's broader "oeuvre – the artist's full body of work" (Coslor, 2016, p. 19). Such factors are at least partly captured in the syntagmatic axis.

The crucial point is, that the associative and syntagmatic axes are two categorically different value dimensions: "Neither order of relations is reducible to the other" (Saussure, 1993, p. 133). In this regard, the current case is particularly illuminating, as *FV* – the hallmark of accounting financialisation – may have been perceived as the ultimate paradigmatic instance of one-dimensional value constellation, but in fact has been shown to be two-dimensional and thereby situational. This case illustrates therefore, that the topological-taxonomic nature of value – its anchoring in similarity and differentiation – is not always enough; classification and categorisation are sometimes only 'half of the story'. While the relationality of value with the general system has been widely investigated, the relationality with the broader value category (e.g., statement or portfolio) requires more attention. With semiology, the relationality of value is refined and multiplied to two distinct dimensions, and the constitutive context of value is refined and divided to two distinct spheres. This theoretical distinction with its pragmatic consequences may serve as a background for further investigations into the irreducible specificity of the value situation.

From Representation to Articulation: Relocating the Judgement of Recognition within Asset Separability

Abstract

Triggered by the IASB's Conceptual Framework project, this paper revisits the issue of asset recognition, and specifically the role and problematics of separability. The paper conducts a systematic analysis of recognition practices prescribed by IASB while mobilising a disciplinary lens outside the conventional resources of accounting research: it uses Ferdinand de Saussure's theory of social sign systems – semiology. Specifically, the notion of *reciprocal articulation* is introduced, to show how accounting entries ('expression') are not passive representations of pre-existing economic resources ('content'), but rather both are mutually constituted by delimiting the resource/asset from its broader category. With this lens, the paper explicates and theorises the decline of the two traditional recognition thresholds (probability and reliability) and the emergence of separability not as a marginal exception but in fact as the core of recognition. Furthermore, as in semiology's articulation, separability is undetermined by technical-natural factors (physical, legal or other extra-accounting anchors), as there is more than one way of articulating the firm to distinct assets. Different from the focus of previous research on intangible assets, the paper shows the malleability of assets with respect to all asset types, including those with physical boundaries. This has implications to the locus and scope of judgment involved in recognition: instead of a Yes/No threshold that characterises the traditional understanding of *recognition as representation*,

the proposed theorisation of *recognition as articulation* entails a spectrum of options with a broader scope of judgment. To the previously discussed plasticity of measurement, it adds attention to the plasticity of recognition. The paper thereby sheds light on the articulatory power – of standard setters and statement preparers – that brings accounting assets into existence.

Keywords: articulation, recognition, separability, semiology

1. Introduction

The judgment involved in the production of the statement of financial position has been usually associated, at least in current Anglophone discourse, with measurement, while the problematics of asset (and liability) recognition have attracted less scholarly attention, which was mostly restricted to the realm of intangible assets. The publication of IASB's Conceptual Framework Exposure Draft (IASB, 2015; hereafter *CFED*) provides an opportunity to revisit the issue of asset recognition and the discretion it entails. The *CFED* proposes to replace the current framework's (IASB, 2010a [1989]) two recognition criteria of probability of future economic benefits and reliable measurement, with a reference – arguably redundant – to the general qualitative characteristics of relevance and faithful representation. In addition, the *CFED* introduces a new exception to the general principle favouring the recognition of all items that meet the definition of an asset: "if it is uncertain whether an asset exists, or is separable from goodwill" (para. 5.13(a)). This paper investigates the issue underlying this seemingly marginal exception, and shows how, contrary to what is portrayed by the *CFED*, separability is the core of recognition for all main asset types and a pivotal locus for the judgment – and power – embedded in the production of the balance sheet.

To investigate the role and nature of separability, the paper takes an interdisciplinary approach, following Barth's (2015) call to expand financial accounting research beyond the traditional resources of economics, finance and psychology and to embrace "relevant complementary expertise and knowledge" from other fields: "Broader and new perspectives can rejuvenate a field and enrich it" (p. 504). One such 'broader and new perspective' that this paper proposes in addressing the issue of recognition is semiology – the theory of social sign systems introduced a century ago by Ferdinand de Saussure and developed later in the 20th century by Roland Barthes.

Semiology has been transformative in the language sciences, to the extent that Saussure is "generally acknowledged as the father of modern linguistics" (Gordon, 2003, p. 993). It has been more modestly mobilised also in accounting literature, mostly with respect to textual discourses and visual images such as in the ancillary parts of corporate reports (Davison, 2008, 2011a,b), accountancy publications (Cooper and Puxty, 1994; Evans, 2004) and discursive practices relating to accountants and related professionals (Malsch and Gendron, 2009; Picard *et al.*, 2014). These analyses frequently investigate what Barthes (1968, 1993, 1997) characterises as second-order sign systems, such as metaphors, myths and rhetorical strategies. This paper proposes to mobilise semiology in investigating a different object of enquiry: the financial-numerical components of the core financial statements. Its interest is not in textual or visual signs but rather in numerical ones; not in 'linguistic semiology', but rather in 'accounting semiology'. With such a semiology, the

paper engages with the fundamental question of knowledge production in the balance sheet.²¹

Specifically, the paper reconstructs and introduces to accounting the concept of *reciprocal articulation*. With it, the relation of expression (e.g., ‘asset’ entries in financial statements) to content (e.g., economic resources) is not one of passive representation that assumes pre-existing elements. Instead, content and expression are co-constituted through articulation, i.e. a delimitation from a broader category. Saussure (2011, p. 112) has redefined language as “the domain of articulations”, and Barthes (1968, p. 57) followed suit: “language is the domain of articulations, and the meaning is above all a cutting-out of shapes”. As articulation has been an influential concept well beyond linguistics (e.g., Deleuze and Guattari, 2013 [1980]; Barad, 2007; and Latour, 2013), the current paper investigates the extent to which there is a basis for theorising accounting recognition as articulation rather than representation, and the ramifications of such re-theorisation.

While the shift between the two IFRS conceptual frameworks is at the background of this study, its focus is not on such proclaimed concepts but rather on the actual recognition practices prescribed by the standard-setter’s guidance. In Barker and McGeachin’s terms, the paper’s interest is not in “IASB’s rationalization of what it asserts it should be trying to do to”, but rather in “what the IASB is actually doing” (2015, p. 183-4). The paper systematically analyses IASB’s recognition requirements with respect to all

²¹ The paper uses the terms ‘statement of financial position’ and ‘balance sheet’ interchangeably.

main asset types, but, different from Barker and McGeachin (2015), it uses an extra-accounting disciplinary lens to inform such analysis.

Such a theoretically informed analysis produces the following main findings. First, the formal recognition threshold criteria (probability and reliability) have been mostly eliminated in IASB's standards, in some cases *de jure*, and in others – *de facto*, where the criteria become merely declaratory. Second, instead of such thresholds, the crux of IASB's recognition practices is separability: an asset is recognised if it is identifiable separately from the firm's cash flow as a whole. Third, separability cannot be determined by technical extra-accounting criteria, such as physical or legal characteristics, and there is frequently more than one way to separate a firm's cash flow to distinct resources. Accounting's separability – as semiology's reciprocal articulation – is anchorless and malleable. Separability-as-articulation is both crucial and indeterminate.

With reciprocal articulation serving as a conceptual instrument (Robson, 1991), the paper contributes to the accounting recognition literature in three interrelated issues. First, it shows how malleable separability is at the core of accounting recognition, and, different from the focus of previous research (e.g., Power, 1992; Napier and Power, 1992; Barker, 2015), such malleability is applicable even to tangible assets. Second, conceptualising asset recognition as reciprocal articulation requires to re-locate and re-characterise the judgment involved in recognition, from a dichotomous question of *if* to recognize a pre-given asset (e.g., Whittington, 2008; Barker and Penman, 2016), to the question of *how* to articulate the entire firm to contingently delimited resources, to which there could be a continuum of answers. Accounting, as a semiological system, involves not only composition, but also (and prior to that) – *de*-composition (Saussure, 2006, p. 11; Barthes, 1968, p. 48, 56). It is not only the

'plasticity of valuation' (Mennicken and Power, 2015) that demands attention in accounting; it is also the plasticity of recognition with the broader discretion that it entails. Third, the paper brings to surface two interrelated but nevertheless distinct dimensions of accounting articulation. As extensively discussed in previous literature (e.g., Power 1992; Grojer 2001; Young and Williams 2010; Rowbottom *et al.* 2016), the general categories of the accounting system are articulated by the community through the standard setter. However, the individual statement – the firm's cash flow – is also articulated to its specific assets by each statement preparer. This distinction is important, because it sheds light on the distribution of the power – the power of articulation – between individual preparers and the community. Assets are the creation of both.

The remainder of the paper is organised as follows. The next section provides the standard-setting background by depicting the shift between IASB's current and proposed conceptual frameworks, and describes the focus of extant literature on asset separability and recognition. The third section introduces the theoretical framework of semiology's reciprocal articulation, and the fourth describes the paper's research design approach. The fifth section analyses the relevant IASB's prescriptions for the recognition of all main asset types, and the sixth discusses the implications of such analysis. The last section provides concluding notes.

2. Standard-setting background and current literature

One of the significant achievements of the new *CFED*, at least in the eyes of IASB and its chairman (Hoogervorst, 2015), is the inclusion of a long-neglected sensitive topic – measurement. A much subtler transformation is the one

relating to recognition; subtle but significant. As shall be argued below, one might say that the *CFED* has, on the one hand, introduced measurement criteria, and, on the other hand, retreated from recognition criteria.

2.1. Between two frameworks: the implicit retreat from recognition criteria

Under the current conceptual framework (IASB, 2010a [1989]), an asset is recognised in the balance sheet if two threshold criteria are met: if it is probable that future economic benefits associated with it will flow to the entity, and the asset has a cost or value that can be measured with reliability (paras. 4.38, 4.44). This dual test is demonstrated in various standards, such as IAS 16 (IASB, 2003a, para. 7) for property, plant and equipment, IAS 40 (IASB, 2003b, para. 16) for investment property, and IAS 38 (IASB, 2004b, para. 21) for intangible assets.

The *CFED* presents a recognition regime that is significantly different. It offers two principles to guide recognition decisions: relevance and faithful representation (para. 5.9). This is not only a change in content of the specific criteria; it is a more fundamental shift in approach. From prescribing explicit thresholds that are relevant specifically to recognition (para. BC5.39), to merely making a reference – arguably a redundant reference – to the general qualitative characteristics of useful accounting information. Relevance and faithful representation are generally applicable, in recognition as in all other aspects of financial reporting, pursuant to chapter 2 of the current framework. In fact, the original version of the *CFED* included a third recognition principle – cost constraint (para. 5.9(c)), but IASB has recently decided to eliminate it, with the view that it applied anyway in recognition as with all other areas of

financial reporting.²² The same argument could have been applied to the two remaining principles of relevance and faithful representation. In that case, nothing would be left under the conceptual category of recognition.

The recognition chapter in the *CFED* nevertheless provides additional guidance in the form of factors that should be considered in deciding whether the principles of relevance and faithful representation are met in the specific context of recognition. With respect to relevance (paras. 5.13-5.21), the assumption is that the requirement is met, unless one of the following three scenarios is applicable: (a) it is uncertain whether an asset exists or is separable from goodwill; (b) there is only “very low probabilities of inflows” (para. 5.19; 5.13(b)) of economic benefits to the asset; (c) the level of measurement uncertainty “is so high that the resulting information has little relevance” (para. 5.13(c); 5.21). These last two factors resonate with the probability and reliable measurement recognition criteria from the existing framework, and the *CFED* emphasises this alleged continuity: “Those indicators cover some (but not necessarily all) cases in which the recognition criteria in the existing *Conceptual Framework* might have led to a conclusion that a flow is not probable or that reliable measurement is not possible” (para. BC5.22).

However, this continuity is only on the surface. The current framework's recognition criteria and the *CFED*'s proposed indicators are fundamentally different. First, in the *CFED* these indicators are not recognition criteria *per se*, but only secondary considerations that are subordinated to the general principles of relevance and faithful representation. Second, under the *CFED*,

²² Staff Paper IASB Agenda 10A, dated December 2016 (accessed September 14, 2017): <http://www.ifrs.org/-/media/feature/meetings/2016/december/iasb/conceptual-framework/ap10a-summary-tentative-decisions.pdf>.

different from the existing framework, the relevance requirement is *prima facie* met with respect to all assets, and the scenarios mentioned above are only the exceptions. Third, the circumstances in which these exceptions should apply are extremely limited in scope. According to the *CFED*, even if the cash flow probability is low, recognition may nevertheless be relevant, because a proper measurement would capture the low probability and a supplementary disclosure would reveal the limitations of such measurement (para. 5.18). Therefore, non-recognition should apply only to situations of “very low probabilities” (para. 5.19). The same applies to measurement uncertainty: uncertainty is not an obstacle, so long as estimates are reasonable and additional disclosure is provided (para. 5.20). Non-recognition should apply only to situations of a “high level of measurement uncertainty” (para. 5.21) – “so high...” (para. 5.13(c)) – for example, when “the range of possible outcomes is extremely wide and the likelihood of each outcome is exceptionally difficult to estimate” (para. 5.21(a)). Overall, the *CFED* reflects an approach – different from that of the existing conceptual framework with its explicit dual threshold – that marginalises the instances of not recognising an item that meets the definition of an asset. In light of the overarching theme that appropriate measurement (and a probabilistic measurement is appropriate) with additional disclosure would usually suffice, the justification for the existence of recognition as a separate category is eroded in the shift from the existing framework to the proposed one.

There is however one new recognition factor that is introduced in the *CFED*: ‘existence uncertainty and separability’ (para. 5.14). Recognition may not provide relevant information: “(a) if it is uncertain whether an asset exists, or is separable from goodwill” (para. 5.13). This is further elaborated in the following paragraph:

Some assets, for example, rights to benefit from items such as know-how and customer or supplier relationships, are not contractual or other legal rights. It may therefore be uncertain whether there is an asset or whether it is separable from the business as a whole (that is, it may be unclear whether there is an asset distinct from goodwill). In some such cases, uncertainty about the existence of an asset combined with the difficulty of separately identifying the asset may mean that recognition may not provide relevant information (*CFED*, para. 5.15).

The role of this exception, as portrayed in the above paragraph, seems to be minor. Furthermore, in the discussion paper, the IASB treated this issue as applicable only to “some rare cases” (IASB, 2013, para. 2.20). This terminology has been deleted from the *CFED*, but it is still considered that “the vast majority of assets and liabilities are not typically subject to existence uncertainty” (*CFED*, para. BC5.31). In opposition to this narrative of the *CFED*, the analysis and discussion in the sections that follow will show how significant this issue actually is; how separability is in fact at the core of accounting recognition practices as prescribed by IASB.

2.2. Extant literature: role of separability in recognition of intangible assets

The challenge to the status of recognition as a distinct category and the growing importance of separability, subtle as they may be in the shift between the current and proposed conceptual frameworks, have been previously raised in the literature though mostly in the context of intangible assets. In that context, Power (1992) and Napier and Power (1992) have problematised the alleged clear distinction between asset identification, recognition and measurement. The boundaries between these three conceptual categories are defused:

In principle, therefore, we need to be able to identify an intangible as an asset before addressing the issues of whether the asset should be

recognised by inclusion in the balance sheet and, if the asset *is* recognised, the amount at which it is so included... While this may be the *logical* approach, issues of identification, recognition and measurement are so heavily interrelated in practice that it is often impossible to distinguish between them (Napier and Power, 1992, p. 86).

The argument about recognition being inextricable from, and in fact subsumed to, measurement has been linked to the requirement of separability, which took a centre stage in Napier and Power's thesis. Separability is problematised by showing that there could be no strict criteria – physical or legal – to assess the separability of intangible assets. They thus argue:

But separability itself is an ambiguous notion, a point which has not been sufficiently appreciated in the brand debate. In particular, separability is confused by lingering physicalist and legalist prejudices. While the ability physically to split off a particular resource from the business as a whole (whether or not we then require the remaining business to be viable) may be *one* criterion of separability, it is not necessarily the only one. Similarly, the ability to identify a resource as a bundle of legal rights...does not exhaust the notion of separability (Napier and Power, 1992, p. 86).

Sherman and Power (1994) also show this ambiguity with the discrepancy between legal and accounting systems of classification of intangible property. The two different typologies have recognised different 'separate' objects. Similarly addressing the brand accounting debate, Power (1992) emphasises "that the 'how' of asset recognition is underdetermined by the elaboration of technical criteria alone" (p. 40). Separability is not a 'natural' concept with obvious criteria of application, but depends upon the acceptance of particular measurement technologies by relevant bodies of expert knowledge (p. 49). The emphasis here is on the constitutive power of the specific measurement technology – which credibility is a product of contingent social, political and institutional factors – in the profession's recognition of certain disputed categories of assets. All three papers highlight the diffusion of recognition into

measurement on the one hand, and the importance and indeterminacy of separability on the other.

El-Tawy and Tollington (2008, 2013) also address these two related issues in the context of intangible assets, but take a different approach. Though they acknowledge that measurability also plays a role in recognition (see also in Tollington, 2006), they insist on the clear distinction between the two conceptual categories (see similarly in Tollington and Spinelli, 2012; El-Tawy and Abdel-Kader, 2013). This approach is based mostly on *a priori* logic: “We are...specifying a key feature of asset recognition on the *a priori* logical basis that asset recognition is before asset measurement” (El-Tawy and Tollington, 2013, p. 69), a perspective which is supported by some of their standard-setter interviewees. On the issue of separability, they also take a different stand. While Power and his colleagues argue that there is nothing natural about separability, El-Tawy and Tollington (2013) aim to identify what are the criteria for an item being ‘separable in nature’. They argue that ‘separable in nature’ is best captured in the capability and right of transferability (pp. 71-72).

More recently, Barker (2015) has also highlighted the important role that separability plays in accounting recognition, stating that “Evidence of separability is thereby evidence of the existence of an economic resource” (p. 531). Barker also shares with the studies discussed above the focus on intangible assets, with the assumption that physical and legal characteristics determine the accounting separability in a less ambiguous manner:

Both of these (closely related) factors [separability and tangibility] contribute to the practical question of whether an economic resource can be identified. Tangibility is not just a description of the physical visibility

(and therefore identifiability) of an item, it also matters because physical possession is a demonstrable attribute of the ability to exclude, of the enforceability of property rights. Intangibles, in contrast, face a greater hurdle in demonstrating the capacity to exclude (Barker, 2015, p. 531).

What is common to the above approaches is the understanding that asset separability – whether ‘natural’ or not, whether situated in recognition or in measurement – is a consequential conceptual category that plays a role in bringing intangible assets into existence. The recognition of tangible assets, on the other hand, seems not to be an issue that requires much attention.

The present study extends the analysis of the role of separability in accounting recognition in three aspects. First, in term of scope: while recognition in general and separability in particular have been previously discussed with respect to intangible assets, this paper offers a systematic analysis of separability with respect to all main asset types. Second, in terms of perspective: different from previous research that has either investigated the institutional-professional arena (e.g., Power, 1992) or the opinions expressed by individual standard setters (e.g., El-Tawy and Tollington, 2013), this paper takes the perspective of IASB’s prescriptions. Such a perspective of the standard-setter’s nuanced recognition practices – which are not necessarily in line with concepts formally proclaimed in its conceptual frameworks (Barker and McGeachin, 2015) – is becoming more and more important, with the move from national to international standards and the significant increase in the number and detail of issued standards and ancillary guidance publications. The third distinguishing characteristic of this paper is the theoretical lens that it utilises: semiology. It is the laying out of such theoretical framework that the paper now turns to.

3. Framework: semiology's reciprocal articulation

The issue of asset recognition may be conceived as one aspect of producing a statement: the statement of financial position. The production of statements is also one way of defining the realm of semiology, introduced by Saussure in his influential *Course in General Linguistics* (2011[1916], hereafter the *Course*), and in his more recently published manuscripts (2006, hereafter the *Writings*). A fundamental and distinctive characteristic of Saussure's sign theory (Daylight, 2012) has been the realisation of the inadequacy of the representation-correspondence relation between expression ('signifier') and content ('signified'). Saussure argues that semiological systems – such as natural language – cannot be fully understood as a representation mechanism, because in such systems there are no readily defined objects (*Writings*, p. 5), ready-made ideas (*Course*, pp. 65, 112) or objectively delimited phenomena (*Writings*, pp. 11, 163). Language is not a naming process (*Course*, p. 114).

Various critical accounting studies have also shown how representation-correspondence is an inadequate theorisation of the financial statement (e.g., Hines, 1988; Alexander and Archer, 2003; Chiapello, 2015). In accounting, as in language, we cannot say that we have first the economic resources and then the accounting expression as its passive sign (e.g., Tinker, 1991; Robson, 1999). The fundamental argument in these and other heterodox accounting studies has been very similar to that of Saussure: it is not that we have "first the object, then the sign" (*Writings*, p. 162). Semiology is enlightening because it goes beyond the critique of traditional correspondence theory of language by offering an alternative conceptual framework for the relation between expression and content. This alternative framework, as reconstructed from Saussure's teaching and writings as well as from Barthes' semiological work,

may be captured under the term *reciprocal articulation* (or *reciprocal delimitation*).

Under such a framework, the identity of a sign is not a product of the relation between the signifier and signified, but rather of the sign's delimitation from other signs in its surroundings (*Course*, pp. 22, 103; *Writings*, pp. 72-73). It is a product of an analytical process of 'separating words' (Joseph, 2004, pp. 41). Such delimitation, articulation or differentiation is the fundamental operation of social sign systems:

the characteristic role of language with respect to thought is not to create a material phonic means for expressing ideas but to serve as a link between thought and sound, under conditions that of necessity bring the reciprocal delimitations of units...the somewhat mysterious fact is that 'thought-sound' implies division, and that language works out its units while taking shape between two shapeless masses (*Course*, p. 112).

Saussure proposes to redefine language as "the domain of articulations" (*Course*, p. 112). He reverses the starting point in the operation of language: it is not the distinct sign, but rather the system and the statements, which are articulated into distinct signs.

Crucially, such articulation is reciprocal in the sense that it involves both the expression and content, with no primacy of the one over the other. Put differently: the act of articulation from the system/statement to the distinct signs is never technical or objective (*Course*, p. 103; *Writings*, p. 11); it is neither natural nor purely rational-logical (e.g., *Course*, p. 78, 133). Expression and thought are delimited together, as both sides of a piece of paper (*Course*, pp. 113, 139). Expression and content are mutually constitutive as "each recalls the other" (*Course*, p. 66); each is decomposed by the other (*Course*, p. 112).

Advocating Saussure's theory and developing it in the sphere of artificial (second-order) languages, Roland Barthes also emphasises the central role of articulation. The semantic process, he argues, is not one of conjunction, composition or correlation, but rather one of simultaneous 'carving out' of two amorphous, continuous masses – ideas (content) and sounds (expression) – where "one cuts at the same time and at a single stroke into these two masses. The signs (thus produced) are therefore *articuli*" (Barthes, 1968, p. 56). He further calls for the need "to emphasize a fact which is of the utmost importance for the future of semiological analysis: that language is the domain of articulations, and the meaning is above all a cutting-out of shapes" (*ibid*, p. 57).

Barthes, following Saussure, highlights the constitutive judgment involved in articulation:

The concept [i.e., articulation] has, in Ignatius, another name which recurs constantly throughout his work: *discernment*: to discern is to distinguish, to separate, to part, to limit, to enumerate, to evaluate, to recognize the founding function of difference...*discretio* is the basis of all language, since everything linguistic is articulated (Barthes, 1997, pp. 52-53).

If representation is about discovery, articulation is about intervention. There is more than one way to articulate content and expression into distinct elements, and the process therefore entails choice and judgment – in that sense: arbitrariness – in the constitution of both:

This is the core of what is absolutely original in Saussurean thought: that the connection between the two domains of values that relate to sound [expression] and to concept [content] is what creates each of them, is essential to each of them, and is the locus of the essential arbitrariness of the language (Joseph, 2012, p. 600).

Offering an alternative to representationalism, the concept of co-producing articulation has played an important role in some of the well-known social-scientific theories of recent years. For example, in Deleuze and Guattari's *A Thousand Plateaus* (2013 [1980]):

The distinction between content and expression is always real, in various ways, but it cannot be said that the terms pre-exist their double articulation. It is the double articulation that distributes them according to the line it draws in each stratum; it is what constitutes their real distinction (Deleuze and Guattari, 2013, pp, 50-51).

Similarly, for Karen Barad, "the relationship between the material and the discursive is one of mutual entailment. Neither is articulated/articulable in the absence of the other; matter and meaning are mutually articulated" (2003, p. 822). And in *An Inquiry into Modes of Existences* (2013; AIME), Bruno Latour argues that

[Articulation] is the ontological foundation of AIME; a being is articulated...It explains the principle "in the beginning was the Word" ('In principio erat Verbum') - we might say, rather, "in the beginning was articulation".²³

However, these three influential treaties (and others) have expanded the applicability of the notion of articulation, with an aim to provide an all-encompassing and metaphysical account of all aspects of the physical, social and symbolic world. Semiology, on the other hand, has purposefully refrained from metaphysical aspirations (*Writing*, p. 56) and remained in the more restricted realm of social sign systems – in which financial accounting is well positioned. Semiology's original reciprocal articulation is therefore

²³ AIME's online glossary, retrieved from www.modesofexistence.org on July 27, 2016.

distinctively suitable to serve as a conceptual instrument (Robson, 1991) in the investigation of the relation between content and expression in financial accounting, or more specifically: in the investigation of the manner in which assets come to be recognised in the statement of financial position.

4. Research approach: systematic analysis of IFRS prescriptions through a conceptual instrument

It is by now widely acknowledged that the practice of financial reporting is multifaceted and is driven and affected by different factors, including the formal and informal practicalities of those involved in the production and auditing of financial statements (e.g., Cooper and Robson, 2006; Huikku *et al.*, 2017; Robson *et al.*, 2017). However, as Barker and McGeachin (2015) highlight, among these various factors, accounting standards also have an increasingly important role, which is not fully accounted for in the literature. In their case, they show, with respect to the issue of accounting conservatism, that “there is relatively little that addresses directly the role of the accounting standard setter in requiring accounting to be conservative...This is an important omission because the standard setters play a central role in the determination of financial reporting practice” (Barker and McGeachin, 2015, p. 170). As shown from the brief literature review above, this is also the case with respect to the issue of separability in accounting recognition. The literature on this issue has been focused on either the social and institutional dimensions in the production of (intangible) asset categories (e.g., Power, 1992), or on *a priori* reasoning and the views of individual standard setters (e.g., El-Tawy and Tollington, 2013). As in the case of accounting conservatism, there is insufficient attention to the standards’ own perspective in relation to separability.

The relative lack of interest in the standards' perspective in issues such as recognition and measurement (as also evidenced in literature reviews by Brown and Jones 2015 and Whittington 2015), may also reflect an implicit assumption that there is nothing to investigate in the actual standards. It is as if the standards provide only the straightforward starting point for the process of producing the financial statement – a starting point which may be disputed normatively, but which is homogeneous and consistent in its own terms. However, such a taken-for-granted assumption must be challenged as well, with a view to investigate the fragility and multiplicity within the realm of the standard-setter's own outputs. As Barker and McGeachin (2015) emphasise, there is a need to distinguish between the standard-setter's proclaimed concepts, especially in conceptual frameworks, and the practices that it actually prescribes in the binding standards and ancillary guiding documents: "we move from the abstract conceptualization (and rejection) of conservatism in the Framework to the reality of defining principles and creating rules to be applied in practice" (pp. 183-4; see also Barker, 2015).

To address this potential gap or 'translation' (Huikku *et al.*, 2017; Robson *et al.*, 2017) between the standard-setter's rationalising rhetoric and the implicit concepts underlying its actual prescriptions, there is a need for "a systematic, direct analysis of IFRS itself, categorizing each accounting standard" based on the themes evaluated (Barker and McGeachin, 2015, p. 183). Interviews with individual standard setters and due-process documentation are of less relevance here, as the concern is not with how standard setters portray the accounting principles, but rather with what is actually produced by them – which is not the same thing.

The current paper proposes such a systematic analysis of IFRS standards and ancillary guidance that prescribe asset recognition practices in general and with a focus on the issue of separability in particular. The corpus produced by the standard setter is never the exclusive input for practitioners, but as its volume and granularity increases, its relative role becomes more significant in the overall process of producing financial statements. With their increase in size and detail, the standard-setter's prescriptions also become a richer object of academic enquiry. Finally, this research-design choice also reflects the objective of this study to engage in a policy debate rather than in a merely theoretical exercise.

However, different from Barker and McGeachin (2015), the current study uses an extra-accounting lens to inform the systematic analysis of IASB's recognition prescriptions. It uses an alternative theoretical framework drawn from a different discipline as a conceptual tool (Bougen and Young, 2012). Standard-setters' prescriptions are rarely researched systematically from an interdisciplinary perspective. However, this unconventional approach and perspective is also a potential source of insights beyond the boundaries of a disciplined discussion. With a different conceptual tool, the aim is to distil findings and generate potential understandings that a conventional intra-accounting perspective is less likely to stimulate.

The study investigates the IFRS standards that prescribe rules for asset recognition, with their accompanying publications, i.e. basis for conclusion and application guidance.²⁴ The main asset categories are intangible assets,

²⁴ Three asset categories – tax, insurance and governmental grants – are not included in the analysis, each in light of its unique characterisation and context. Each such asset category is subject to extra-accounting influences (tax and governmental grants – by

tangible assets (PPE and investment property), assets purchased in business combinations, extractive industries assets, and biological assets. Other categories, which are less significant for the purpose of this paper, are briefly covered in a summary table (*Table 1*). In cases where new standards have been recently enacted with a future effective date, these (and not the older standards currently in effect) have been analysed, as the interest is in IASB's most current trends. With respect to extractive industries assets (minerals, oil and gas), IFRS 6 (IASB, 2004d) does not prescribe recognition principles (paras. 6-7, BC17). In light of this lacuna, this paper's analysis of the recognition of this unique asset type is based on the 2010 Discussion Paper on Extractive Activities (IASB, 2010b; hereafter the *Discussion Paper* or *DP*).²⁵ Overall, ten standards, one exposure draft and one discussion paper are covered.

5. Analysis: IASB's prescriptions of recognition criteria and separability

A close reading of the *CFED* in section 2.1 has expounded a significant shift in the conceptualisation of asset recognition, where existing recognition criteria have been marginalised and a new more amorphous conceptual category – separability – has been introduced. Some of the previous studies discussed in section 2.2, restricted to the realm of intangible assets, have pointed to the importance of separability and to its malleable nature. These introductory sections set the background for a systematic analysis of IASB's recognition prescriptions, as applicable to all main asset types. Such analysis, informed by

national policies, and insurance – by relevant regulatory regimes), that make their analysis incomparable with that of the other main asset types.

²⁵ It should be noted that the Extractive Activities project has been paused and the *Discussion Paper* represents only the views of a research team appointed by IASB, and not those of the Board itself.

the conceptual tool of semiology's reciprocal articulation introduced in section 3, will provide a broader perspective on the role and nature of separability in financial accounting recognition.

5.1. Intangible assets (IAS 38)

The recognition criteria for intangible assets under IAS 38 are the traditional pair: probability of future economic benefits "attributable to the asset" and reliability of the asset's cost measurement (para. 21). However, both criteria assume the existence of "the asset", which is far from being a trivial assumption. An intangible asset is defined as "an identifiable non-monetary asset without physical substance" (para. 8). This definition is primarily negative – it focuses on what an intangible is *not* – except for one affirmative component: identifiability. Identifiability is the ability to delimit an asset from the corporate entity as a whole: "The definition of an intangible asset requires an intangible asset to be identifiable to distinguish it from goodwill" (para. 11). Although an asset may be considered 'identifiable' if it arises from contractual or other legal rights (para. 12(b)), the legal criterion does not provide a comprehensive answer for the question of identifiability. Instead, the first principle governing 'identifiability' is separability: an asset is identifiable if it is

separable, ie is capable of being separated or divided from the entity and sold, transferred, licensed, rented or exchanged, either individually or together with a related contract, identifiable asset or liability, regardless of whether the entity intends to do so (para. 12(a)).

Separability from the whole entity is a necessary step in recognising an intangible asset.²⁶

More importantly, when moving from the proclaimed concepts of IAS 38 to an analysis of its practical assumptions, the two formal recognition criteria are shown to be mostly redundant, and separability remains as the primary recognition condition. In the context of an acquisition of a separate intangible asset, “the probability recognition criterion in paragraph 21(a) is always considered to be satisfied” (para. 25), and “In addition, the cost of a separately acquired intangible asset can usually be measured reliably” (para. 26). Similarly, though much less intuitively, in the context of business combinations, “the probability recognition criterion in paragraph 21(a) is always considered to be satisfied” and “the reliable measurement criterion in paragraph 21(b) is always considered to be satisfied” (para. 33). On the other hand, the standard also makes a clear assumption – opposite to the previous one – that the recognition criteria can *never* be met with respect to most types of internally generated assets: “Internally generated brands, mastheads, publishing titles, customer lists and items similar in substance shall not be recognised as intangible assets” (para. 63). These “cannot be distinguished from the cost of developing the business as a whole” (para. 64). The two formal recognition criteria are therefore mostly general declaratory statements, and not operable criteria that require judgment in order to be applied in the specific circumstances of each particular firm.

²⁶ Notwithstanding the above-mentioned distinction between ‘identifiability’ and (its sub-category) ‘separability’, this paper (as others: see, e.g., Power, 1992) will use the term ‘separability’ in the broader sense, and is therefore interchangeable with ‘identifiability’.

The contrast between purchased and internally generated intangible assets illustrates how accounting separability, as semiology's articulation, is far from being of a technical nature. In the context of business combinations, where the standard setter aims to allow recognition of as many assets as possible (as evidenced from its 2004 amendment to IAS 38), separability is stripped of any restricting elements. The statement simply determines *a priori* that "sufficient information exists to measure reliably the fair value of the asset" (para. 35). Even if there is a range of possible outcomes with different probabilities, that uncertainty is not considered an obstacle, as "that uncertainty enters into the measurement of the asset's fair value" (*ibid*). In the context of internally generated assets, on the other hand, separability comes to life as a restrictive device. Here, there are problems of "identifying whether and when there is an identifiable asset that will generate expected future economic benefits", and difficulties of "determining the cost of the asset reliably [as] in some cases, the cost of generating an intangible asset internally cannot be distinguished from the cost of maintaining or enhancing the entity's internally generated goodwill or of running day-to-day operations" (para. 51). With respect to internally generated assets, therefore, the *a priori* rule is reversed: the standard simply determines that internally generated brands and similar items cannot be distinguished as separate assets. Separability is plastic enough to allow the standard setter to use it in opposite directions.

However, the importance and plasticity of separability is not only in the operation of the standard setter in its categorisation of the accounting system as a whole. Separability also underlies the operation of the individual preparer producing the specific statement. Indeed, in semiology the operation of articulation is in two levels: that of the system and that of the statement. The former is manifested in the manner in which new words are introduced into,

or leave, a language system. A new word comes to life through differentiation from existing, broader, ones (*Writings*, p. 68), and if a certain word is lost, the remaining system will re-adjust its internal arrangement of delimitations in a manner that it would continue to account for all phenomena (*Writings*, p. 191). However, Saussure and Barthes frequently refer to the statement (or 'syntagm') – as distinct from the general system – as being delimited: "the analytical activity which applies to the syntagm is that of carving out" (Barthes, 1968, p. 58; and see further references in the *Course*, pp. 10, 103-105, 112-113; Barthes, 1997, p. 56).

This is also the case in accounting for intangible assets. While the accounting system as a whole is articulated by the standard setter, each particular statement – a firm's cash flow – is articulated to distinct assets by the statement preparers. The lack of anchors in determining the accounting separability is manifested also in this level of the individual preparer. Under the standard's definition of identifiability quoted above, an asset may be separable "either individually or together with a related contract, identifiable asset or liability" (IAS 38.12(a)). There is more than one way to delimit 'one' intangible asset. This judgment-based malleability of the asset's boundaries is also illustrated in the context of mixed assets, which have both tangible and intangible elements. Under paragraph 4 of IAS 38, "an entity uses judgment to assess which element is more significant". If, for example, a software is "an integral part of the related hardware", it must be treated as tangible property under IAS 16. If, on the other hand, "the software is not an integral part of the related hardware, computer software is treated as an intangible asset". A similar issue of the plasticity of the asset is found in the context of subsequent expenditure, where "it is often difficult to attribute subsequent expenditure directly to a particular intangible asset rather than to the business as a whole" (para. 20).

All these instances illustrate how the judgment provided to, and required from, the preparer in the recognition of intangible assets has more to do with the asset's separability with its indeterminable nature, than with the two formal recognition thresholds.²⁷

5.2. Assets purchased in business combinations (IFRS 3)

The central role of separability and its malleable nature are clearly shown also in the context of business combinations under IFRS 3 (IASB, 2004c), where the objective is to establish principles of how an acquirer “recognises and measures in its financial statements the identifiable assets acquired” (para. 1). The preparer is confronted here with the necessity to separate – to articulate – the whole purchased business into distinct assets (paras. 5, 10).

While separability is central to the application of IFRS 3, the two traditional recognition criteria are no longer included in the standard, following its revision from 2008. With respect to the reliability criterion, IASB's argument for its removal has been that it was already included in the conceptual framework and was therefore redundant in the standard. However, as pointed out by Barker and McGeachin (2015, p. 193), there are other assertions in the standard's basis for conclusion (e.g., paras. BC153, BC160) suggesting that reliability is met anyway (and therefore redundant) in fair value measurement, which is the measurement basis applicable to business combinations. With respect to the probability criterion, IASB explains that it would always be

²⁷ In the case of intangible assets arising from research and development (paras. 57-62), the discretion is mainly with respect to the question of whether the development has reached an advanced-enough stage in order to be recognised as an asset. In order to demonstrate probability of future economic benefits, the asset may be combined with other assets (para. 60), and the reliability of cost measurement is also not a barrier, as it can be evidenced by the entity's costing systems (para. 62).

considered met (paras. BC125-130). In fact, in IFRS 3 there are no recognition criteria at all: any item that meets the definition of an asset would be recognised in the post-acquisition balance sheet (para. 11).

As with respect to intangible assets, separability (identifiability) is the single most important recognition principle in business combinations (IFRS 3, para. 10). IFRS 3 is just more transparent about that principle when compared to IAS 38, by explicitly eliminating the technical recognition thresholds. The principle though is shared by both standards: "In developing IFRS 3, the IASB affirmed the conclusion in IAS 38 that identifiability is the characteristic that conceptually distinguishes other intangible assets from goodwill" (IFRS 3, para. BC162).

As in IAS 38, also in IFRS 3, separability is intrinsically malleable. The definition of 'identifiable' under IFRS 3 (Appendix A) is identical to that in IAS 38, with all its plasticity discussed above. Though IFRS 3 provides more detail on the identifiability of intangible assets (e.g., IFRS 3, paras. B33-34), its principles are applicable to both tangible and intangible assets. There could be more than one way of separating the acquired business to its distinct 'identifiable' assets and liabilities.

Furthermore, the crucial role of separability is also manifested in making the decision of whether the acquisition is that of a 'business' (for which IFRS 3 should apply) or of an asset (for which it should not). In a recently issued exposure draft (IASB, 2016b), it is proposed to revise the definition of a 'business', by determining that: "if substantially all of the fair value of the gross assets acquired is concentrated in a single identifiable asset or group of similar identifiable assets, then the set of activities and assets is not a business" (para.

B11A). The proposal expands the factors relevant in assessing the separability of tangible assets:

for this assessment, tangible assets that are attached to, and cannot be physically removed and used separately from, other tangible assets without incurring significant cost, or significant diminution in utility or fair value to either asset, shall be considered a single identifiable asset (IASB 2016b, para. B11B).

The physicality of the asset is a relevant factor but not a conclusive determinant for deciding the asset's boundaries. An economic criterion is added to the physical one: separation may be possible physically, but if it results with incurring 'significant cost' or 'significant diminution in utility or fair value', then for accounting purposes it would not be considered separate. Furthermore, separability is not generalizable to market prices, as 'utility' may differ from one firm to another. Separability is, also in this context, irreducible to pre-determined criteria.

5.3. *Tangible assets: Property Plant & Equipment (IAS 16) and Investment Property (IAS 40)*

IAS 16, prescribing the recognition requirements for property, plant and equipment (PPE), requires the thresholds of probability and reliability (para. 7). The question here, however, is not only *whether* to recognise a resource as an asset. There is also, just as in the case of intangible assets, the fundamental and more ambiguous question of *what* is the asset, or put differently: *how* to recognise the entity's resources – how to delimit the firm's cash flow to distinct assets. This is the issue of the unit of measure/account, and the standard acknowledges the inability to provide strict answers in this regard:

This Standard does not prescribe the unit of measure for recognition, ie what constitutes an item of property, plant and equipment. Thus, judgment is required in applying the recognition criteria to an entity's specific circumstances. It may be appropriate to aggregate individually insignificant items, such as moulds, tools and dies, and to apply the criteria to the aggregate value (IAS 16.9).

As in the case of intangible assets, tangible assets can be delimited in various ways. This is highlighted, for example, with respect to bearer plants, where the "question arises as to what the unit of measure is – for example, is it the individual plant or some larger aggregation, such as a field or a planting cycle?" (para. BC80). The standard setter admits that there is no one single answer:

The Board noted that IAS 16 does not prescribe the unit of measure, or the extent to which items can be aggregated and treated as a single item of property, plant and equipment. Consequently, applying the recognition criteria in IAS 16 to bearer plants will require judgment. This would give an entity flexibility, depending on its circumstance, to decide how to aggregate individual plants for the purpose of determining a measurable unit of bearer plants (IAS 16.BC81).

Furthermore, legal principles, as physical characteristics, cannot determine accounting separability: land and buildings would frequently be considered inseparable for legal (ownership) purposes, but for recognition purposes, they are "accounted for separately, even when they are acquired together" (IAS 16.58). The more important factor in this context is the estimated future economic benefits, as manifested in the depreciation method and useful life (*ibid*). But even the economic perspective is not the ultimate arbiter in determining separability, as one can justify the aggregation of 'not significant' components with different life spans and different depreciation methods by using approximation techniques (para. 46) such as a weighted average useful life.

Different from IFRS 3 and IAS 38, the formal recognition criteria are neither eliminated nor assumed *a priori* in IAS 16, but it is clear that these criteria cannot provide the ultimate answer to the question of what assets are to be recognised. This fundamental question – here in the form of unit of measure – remains a question of separability, and here, just as in IAS 38 and IFRS 3, separability is not determined by extra-accounting factors (physical or legal).

As to investment property, IAS 40 also requires the traditional criteria of probability and reliability (para. 16). However, the probability requirement is not discussed in the standard, and there is a rebuttable presumption that reliable measurement (fair value) is available, and if not – cost would be applicable (para. 53). The recognition thresholds are not at the core of the judgment required from preparers in the application of IAS 40.

The issue of separability, on the other hand, is crucial, first, at the initial step of deciding whether the asset should be classified as investment property under IAS 40 or as PPE under IAS 16. An investment property is one that can “generate cash flows largely independently of the other assets held by an entity” (IAS 40.7). Such separability is not always a clear-cut conclusion: sometimes “it is difficult to determine whether ancillary services are so significant that a property does not qualify as investment property” (para 13). It is therefore acknowledged that “judgment is needed to determine whether a property qualifies as an investment property” (para. 14). Also, sometimes the same physical asset may comprise of certain parts that are held to generate rental or capital appreciation (investment property) and others are used for administrative services (PPE) (IAS 40.10).

Furthermore, the boundaries of an investment property are not pre-determined, as there could be different ways of separating the investment property from the PPE. This flexibility underlies the standard's emphasis that an entity should not “double-count assets or liabilities that are recognised as separate assets or liabilities” (para. 50). For example, equipment such as lifts and air-conditioning infrastructure would not be accounted for as PPE, if it is generally included in the fair value of investment property (para. 50(a)). Even furniture may be included as part of the property, if an office is leased on a furnished basis (para. 50(b)).

Separability is therefore the main issue to consider in classifying a tangible asset into PPE or investment property, and in the subsequent recognition of an asset under any of these two categories. Furthermore, as in the case of intangible assets, separability is not reduced to physical, legal or economic criteria.

5.4. Minerals, oil and gas properties (Discussion Paper, 2010b)

Minerals, oil and gas properties (extractive activities) comprise a distinct asset category that is excluded from the scope of IAS 16 (para. 3(c)) and IAS 38 (para. 2(d)). It is in between the tangible and intangible asset categories (*DP*, para. BC32-34). The *Discussion Paper's* starting point is the traditional criteria of probability and reliability (para. 3.10). However, similar to the case of purchased intangible assets under IAS 38, these two criteria are assumed to be met *a priori*, and no judgment is required on behalf of the preparer. With respect to the first, “The probability criterion is met for the reasons outlined in paragraph 25 of IAS 38” (para. 3.15), and the second criterion is also considered to be met, whether the extraction rights are measured at historical cost (para.

3.16) or at fair value (para. 3.17). In summary, "rights and information associated with minerals or oil and gas properties satisfy the asset recognition criteria" (para. 3.33; see similarly in para. 3.15). The judgment of the individual preparer is located elsewhere: the boundaries of the extractive assets – and their unit of account – are the main issues discussed throughout the *DP's* recognition chapter.

The *Discussion Paper* provides various factors that are relevant in determining the separability of an asset or a unit of account, in a manner that allows more than one way to delimit the firm's resources and determine their boundaries. Even geographical boundaries are not fixed in stone: "There is a range of possible geographical boundaries that could be applied to define the unit of account for mineral or oil and gas properties" (para. 3.44). For the *DP*, "geographical dimensions" include much more than geography:

The possible boundaries could be set by reference to one or more of the following attributes: (a) geopolitical characteristics, such as each country or group of countries in which the entity operates...(b) geological characteristics...(c) legal characteristics...(d) economic characteristics, eg an area that is managed separately or has independent cash flows (para. 3.44).

The *Discussion Paper* emphasises that none of these aspects can exclusively determine the unit of account, and that different aspects may direct to different segmentations of the firm. For example,

Aggregating assets that share the same geopolitical risks into a single unit of account (eg a country-based unit of account) would ignore the fact that assets in different locations (eg different mines in a country) may be subject to very different geological risks, may have different subsequent accounting in terms of useful lives and impairment, and may have largely independent cash flows. Similarly, aggregating assets that belong to a defined geological region into a single unit of account ignores the fact that

the geological region may extend across a number of jurisdictions that are subject to different political risks (para. 3.45).

Economic factors are important in defining the recognised asset/unit, especially through the question of whether a separate asset/unit produces separate economic benefits: one must identify assets “that generate independent cash flows or are subject to particular risks” (para 3.39; see similarly in paras. 3.24, 3.41(a), 3.46, 3.54-3.56, 3.65). However, an economic analysis is not the ultimate criterion: “Defining the unit of account boundaries solely according to legal or economic characteristics may not be a suitable alternative either” (para. 3.46). Generally, there is a mix of physical, socio-political, legal and economic factors, as well as managerial and commercial factors, which should be somehow combined to determine separability, with no overarching criterion (see paras. 3.47, 3.49, 3.54, 3.55, 3.63, 3.67).

Furthermore, the delimitation of the firm to various assets is not fixed (paras. 3.48-3.53). A firm may start with a broad unit of account at the exploration stage, which would become more granular when moving to production activities: “Ultimately this process of redefining the unit of account will evolve into the unit of account used for extraction rights” (para. 3.52). This dynamic nature of delimitation is also manifested in the context of items of plant and property: these would not be part of the unit of account at the exploration stage, but would become part of it in the development and production stages (paras. 3.59-3.63, 3.65).

The *Discussion Paper* concludes by providing various principles that are relevant to determining the boundaries of the unit of account (para. 3.67), but acknowledges that there are no clear answers:

The project team notes that the extent to which plant and equipment assets are interrelated to the legal rights will depend on the specific facts and circumstances. It would therefore be difficult, and undesirable, for an IFRS to prejudge which assets can and cannot form part of the same unit of account as the legal rights. Professional judgment will need to be exercised if an entity's minerals or oil and gas properties are to be faithfully represented in the entity's financial statements (para. 3.66).

Importantly, the 'professional judgment' required here is to be made not only with respect to extra-accounting factors (e.g., physical, geological, geopolitical and legal circumstances) but also with respect to the accounting presentation itself. The criteria for accounting separability depend also on future accounting treatment, especially with respect to depreciation and impairment: "Separate units of account are required when the subsequent accounting is different" (para. 3.41). For example, "If the measurement basis is historical cost, some assets associated with the legal rights may become impaired or may be disposed of separately from other assets within the property", and this would be a factor in selecting the unit of account (para. 3.64(c)). Similarly, with respect to depreciation: different excepted depreciation rates are an indication for different units of account (para. 3.64(b)). The accounting decision about separability is not only judgment-based, flexible and plastic; it is also, at least partly, circular: it depends on accounting decisions. It cannot be outsourced to extra-accounting experts or secured by extra-accounting anchors.

5.5. Biological assets and agricultural produce (IAS 41)

Biological assets (other than bearer plants) are explicitly excluded from the scope of IAS 16 (para. 3(b)). However, the approach of IAS 41 (IASB, 2003c) is not different from that of IAS 16. Here, we also find the formal recognition criteria of probability and reliability (IAS 41.10), and here, as well, these are not the core of the recognition judgment. The standard declares that "there is

a presumption that fair value can be measured reliably for a biological asset”, and continues that if such presumption is rebutted, cost is assumed to be available (IAS 41.30). Similarly, with respect to agricultural produce: “This Standard reflects the view that the fair value of agricultural produce at the point of harvest can always be measured reliably” (para. 32). The reliability criterion is – once again – merely declaratory. The probability threshold is not discussed.

Separability, on the other hand, has an important role in the recognition of biological assets, and it is acknowledged as a flexible feature. As for other asset types discussed above, such flexibility is used in order to address (or, more bluntly: dismiss) the issue of reliable measurement:

The fair value measurement of a biological asset or agricultural produce may be facilitated by grouping biological assets or agricultural produce according to significant attributes; for example, by age or quality. An entity selects the attributes corresponding to the attributes used in the market as a basis for pricing (IAS 41.15).

Furthermore, IAS 41 shows clearly how separability may not be reduced to extra-accounting criteria:

Biological assets are often physically attached to land (for example, trees in a plantation forest). There may be no separate market for biological assets that are attached to the land but an active market may exist for the combined assets, that is, the biological assets, raw land, and land improvements, as a package. An entity may use information regarding the combined assets to measure the fair value of the biological assets. For example, the fair value of raw land and land improvements may be deducted from the fair value of the combined assets to arrive at the fair value of biological assets (IAS 41.25).

The physical inseparability of the trees to the land they grow on, and the economic inseparability of them in the relevant markets, are ignored when determining the boundaries of accounting assets. This is the fundamental indeterminacy of separability – for biological assets as for other assets.

5.6. Other assets and summary

The findings of the above analysis are summarised in *Table 1* below. The table also includes a summarised analysis of recognition and separability in other asset categories, which are less significant in the current context. These include borrowing costs under IAS 23 (IASB, 2007), leases under IFRS 16 (IASB, 2016a), financial assets under IFRS 9 (IASB, 2014) and inventory under IAS 2 (IASB, 2003d). All main asset categories – tangible, intangible and ‘in-between’ (extractive assets and biological assets) – as well as most other asset categories, share the following common trends:

- (a) The traditional recognition criteria of probability and reliability are marginalised: in some cases they have been explicitly eliminated, in others – they are empty declarations that do not require judgment by the statement preparers.
- (b) Instead of recognition criteria, the focus of recognition is in the question of the asset’s separability – its delimitation from the entity's cash flow as a whole.
- (c) Separability has no technical-natural determinants, it cannot be based only on extra-accounting factors (physical, legal or even economic) and there is no one predetermined manner of delimiting the firm and determining the boundaries of its assets.

Table 1: The Roles of Recognition Criteria and Separability in IASB's Asset Recognition Standards

Type of assets	Recognition criteria	Recognition criteria marginalised?	Separability playing a significant role?	Judgment in separability?
Intangible Assets (IAS 38)	Probability and Reliability (para. 21).	Both criteria are assumed to be met in separate acquisition (paras. 25-26) and in business combination (para. 33), and not met in most internally generated assets (paras. 63-64). The recognition criteria become merely declaratory, with the exception of the development stage in R&D.	In the definitions of an 'intangible asset' (paras. 8, 11), 'identifiability' (para. 12).	More than one way to separate: either individually or with related items (para. 12). Judgment in separating tangible components from intangible components in mixed assets (para. 4). Judgment in attributing subsequent expenditure to the original asset or to the entity as a whole (para. 20).
Assets in Business Combinations (IFRS 3) (ED/2016/1)	None (eliminated in 2008).	NA	The purchaser is to recognise the identifiable assets acquired (paras. 10, BC162). The proposed definition of a 'business' is based on identifiable asset or 'group of assets' (para. B11A), which provides discretion in determining the boundaries of the asset.	Separation is either individually or with related items (Appendix A). To determine the boundaries of a single asset one must add to the physical separability, aspects of separate use and economic consequences (para. B11B).

Tangible Assets: Property Plant and Equipment (IAS 16)	Probability and Reliability (para. 7).	No	The question of what PPE items are to be recognised separately is determined by the unit of measure. It may be appropriate to aggregate items (para. 9).	<p>The boundaries of the unit of measure for recognition are not prescribed by the standard – judgement is required (para. 9).</p> <p>The flexibility of the unit’s boundaries and the judgement needed is exemplified in the case of bearer plants (paras. BC80-81).</p> <p>Physical attachment and legal inseparability may be disregarded in determining accounting separability, as in the case of land and buildings (para. 58). The economic characteristics (e.g., useful lives) are not conclusive, as aggregation and averaging are possible (para. 46).</p>
Tangible Assets: Investment Property (IAS 40)	Probability and Reliability (para. 16).	Reliable measurement is assumed, either in fair value or cost (para. 53), and therefore merely declaratory. Probability is mentioned but not discussed.	The distinct characteristic of investment property is its separability from other items and its capacity to generate cash flow independently (para. 7).	<p>It is difficult to determine if ancillary services are so significant that the independent cash flow criterion is not met (para. 13); judgment is required (para. 14).</p> <p>The same physical asset may comprise of both investment property and PPE (para. 10). Different ways to set the limits of the investment property in relation to PPE; the need to avoid double counting (para. 50).</p>

Minerals, Oil and Gas Properties (Extractive Activities DP)²⁸	Probability and Reliability (para. 3.10).	Both criteria are assumed to be met (paras. 3.15-3.17, 3.33), and therefore merely declaratory.	Separability of assets and units of account is the main question discussed in the recognition chapter (throughout chapter 3).	Various factors must be considered to determine the boundaries of the asset/unit. These considerations include geographical, geopolitical, geological, legal, economic, commercial and managerial factors (e.g., para. 3.44). None of these is an exclusive arbiter (e.g., para. 3.45-6). Limits are impacted also by accounting factors, such as expected depreciation and impairment (e.g., paras. 3.39, 3.41, 3.64), and constructed cash flows. There is more than one possible set of boundaries (para. 3.44). The separation of the firm to individual assets/units is evolving throughout the production process (paras. 3.48-3.53). Professional judgment is required (para. 3.66).
Biological assets and agricultural produce (IAS 41)	Probability and Reliability (and control as a result of past events) (para. 10).	Reliability in measurement is assumed to be met (paras. 30, 32), and therefore is merely declaratory; probability is not discussed.	Grouping may be required in order to facilitate reliable measurement (para. 15).	There could be more than one way to group assets (para. 15). The separability of the accounting asset is not determined by physical or economic (market) conditions (para. 25).

²⁸ In IFRS 6 recognition is not addressed.

Borrowing Costs (IAS 23)	Probability and Reliability (para. 9)	No	Only costs that are directly attributable to (are separated from the firm's general expenses) the qualifying asset are recognised (paras. 1, 8).	Identifying a direct relationship of borrowing costs with a qualifying asset (i.e., their separability from the firm's cash flow as a whole) may be difficult and the exercise of judgment is required (para. 11).
Leases (IFRS 16)	None. There are only recognition exemptions for short-term or low-value leases (para. 5).	NA	A company must separate each lease component from other lease and non-lease components (para. 12).	Allocation of the consideration to each lease and non-lease component is not always anchored in market price and may require estimations (para. 14). Separability could be established either for an underlying asset on a stand-alone basis or together with other resources (para. B32), so the boundaries of the lessee's assets are flexible.
Financial assets (IFRS 9)	None	NA	No	NA
Inventories (IAS 2)	None	NA	No	NA

6. Discussion: the implications of Separability-as-Articulation

When the underlying trends of the IASB's prescriptions for the last two decades are made explicit and systematised, as done in the analysis above, the shift from the current conceptual framework to the proposed one is less surprising. The practices prescribed by IASB reflect a growing realisation that asset recognition cannot be captured in the strict thresholds, and the focus is rather on asset separability with its malleable nature. The current section draws some implications from this focus on separability, as theorised through the concept of reciprocal articulation.

6.1. Separability at the crux of recognition: the plasticity of (not only intangible) assets

The *CFED* introduces the concept of asset separability in a minor manner, stating that it would not be relevant in the “vast majority of assets and liabilities” (*CFED*, para. BC5.31) but rather only to very specific cases associated with intangible properties, “for example rights to benefit from items such as know-how and customer or supplier relationships” (para. 5.15). The literature has given a more significant role to separability, but has also restricted the debate over the issue to the case of intangible assets. This is a characteristic of both interdisciplinary studies, which have drawn from science studies (e.g., Power, 1992; Napier and Power, 1992) and those that have been more informed by accounting policy-making (e.g., El-Tawy and Tollington, 2008, 2013; Tollington, 2006; Barker, 2015). The implicit – and consequential – assumption underlying this focus is that separability raises no issues with respect to physical assets (see, e.g., Sherman and Power, 1994, p. 487). The tangible/intangible dichotomy and the assumption underlying it are illustrated in broader contexts. Llewelyn and Milne (2007), for example,

contrast material aspects of the ‘financial reality’, as reflected in “tangible assets like buildings, equipment and cash”, and socially embedded elements, which include “intangible assets such as intellectual capital” (p. 806). With such a dichotomy, they also make the assumption that: “With regard to the material aspects of the financial world, these are relatively easily cast into numbers; the socially embedded side presents more difficulties” (*ibid*). The current paper's findings contest this widely shared and intuitive assumption.

The analysis of IASB’s actual prescriptions has shown that the issue of separability – and its malleable nature – is neither of minor importance nor of restricted applicability to the intangibles realm. Separability is a crucial issue in the recognition of assets of all types: intangible assets, minerals, oil and gas assets, biological assets and ‘ordinary’ tangible assets. The physicality of tangible assets is not an obstacle from their plasticity. One example is real estate: while land and the buildings located on it are the paradigmatic instance of physical inseparability (and, in many jurisdictions, of legal ownership inseparability), for accounting purposes they would be deemed as separate assets. A similar paradigmatic case is that of agricultural plants, which for most purposes – including economic valuations and typical transactions – would be deemed inseparable from the land on which they grow, but are nevertheless separate for accounting treatment purposes. The current paper suggests therefore that tangibility is only an epiphenomenon to one ultimate recognition principle: separability.

Thinking of the boundaries of tangible assets as malleable is counterintuitive because of the association of the physical – and hence, fixed – properties of such assets. However, these physical elements are *not* the object of the financial statement; its objects are instead the conceptual economic resources. The object

of the statement is the anticipated economic benefits (cash flows) deriving from the legal rights over the physical asset; not the physical asset *per se*. This important distinction finds support in the *CFED*: “Conceptually, the economic resource is the set rights [arising from legal ownership] not the physical object” (para. 4.12); and: “To illustrate the effect of this change in emphasis, the Discussion Paper suggested that, for a physical object...the economic resource is not the underlying object but a right (or a set of rights) to obtain the economic benefits generated by the physical object” (para. BC4.30). This is where the distinction between the ‘referent’ (the physical asset) and the ‘signified’ (the conceptual-economic attribute) is so consequential. In semiology, it is only the latter – with its plasticity – that is relevant in the production of statements. As Joseph (2016, p. 197) emphasises, in semiological systems the signifieds “too are not objects, but values...created through difference”. When the items on the balance sheet stand for conceptual signifieds and not for physical referents, the plasticity of the asset’s boundaries, tangible assets included, is less counter-intuitive.

The signified/referent distinction opens the way to challenge the taken-for-granted assumption about the allegedly natural pre-given boundaries of tangible assets, and to appreciate the judgment involved in their recognition. The central role of separability in asset recognition – in bringing assets of all types into existence – should not be surprising if separability is understood as a manifestation of reciprocal articulation. If we follow Saussure’s and Barthes’ semiology, it becomes clear that the main operation in accounting recognition is the delimiting of the firm into tentative elements of various kinds.

6.2. *From representation to articulation: relocating and re-characterising the judgment of recognition*

The retreat from the formal recognition thresholds and the increasing realisation of the role of separability problematise the traditional conceptualisation of accounting recognition. Instead of aiming at an adequate representation of discrete pre-given elements, recognition practices embody the understanding that there are various potential alternatives of articulating the whole entity to delimited parts. Indeed, this is what we learn from semiology, which reverses the conventional starting point in language. In accounting, as in language, the starting point is not the individual signs that require aggregation and composition, but rather the whole system and statement that require delimitation and segmentation.

This emphasis deviates from current views on recognition and existence uncertainty. Whittington (2008), addressing the notion of ‘element uncertainty’ under UK’s previous Statement of Principles (ASB, 1999), subsumes this issue to the question of probability of economic benefits: “Such ‘non-assets’ of the entity would include assets whose existence cannot be established with an acceptable level of probability” (p. 151). More recently and with direct reference to the *CFED*, Barker and Penman (2016) briefly refer to ‘existence uncertainty’, which for them is manifested in questions such as “whether the entity has control or whether economic benefits (cash flows) are expected” (p. 6). Different from Whittington (2008) and in deviation from the *CFED*, Barker and Penman do not justify treating existence uncertainty as a distinct category, separate from the measurement-oriented ‘outcome uncertainty’. These two are viewed as “very closely related” as both “are concerned with uncertainty around the amount and timing of economic

benefits expected to flow to or from the entity” (p. 7). The approaches taken by Whittington (2008) and Barker and Penman (2016) are different, but they share an assumption that recognition is a process whereby assets are to be assessed for their meeting of certain measurement-oriented thresholds: probability (Whittington) or uncertainty (Barker and Penman). Furthermore, neither Whittington (2008) nor Barker and Penman (2016) relate separability to 'existence'. They share the fundamental view that the recognition question starts with pre-given distinct objects, resources, assets (see similarly in Williams, 2003).

This is precisely the starting point that semiology challenges: "There are no pre-existing ideas, and nothing is distinct before the appearance of language" (*Course*, p. 112). As Barthes (1968, p. 48) argues, “the mind does not proceed, in the semantic process, by conjunction but by carving out”. This paper's analysis shows that the same overarching principle is manifested in IASB's recognition prescriptions: instead of asking *if* to recognise a certain asset (based on questions of probability and reliability) in order to compose the entire a statement, the focus is on *how* to delimit the statement – the firm – to separate assets.²⁹ The starting point is the whole cash-flow and the operation is one of *de*-composition. With this reformulation, 'existence' and 'separability' – grouped in the *CFED* under one heading (paragraph 5.15) – are much more closely related. The *existence* of an asset is a product of its *separability*.

²⁹ This theorisation is more in line with the Italian tradition of the mid twentieth century, which is associated with Gino Zappa, where the firm was viewed as a unitary system (Zambon and Zan, 2000, p. 801), and where the emphasis “was on the organization taken as a whole”, which was more than a composition of distinct individual parts (Dagnino and Quattrone, 2006, p. 41).

Furthermore, the IASB's recognition prescriptions also illustrate how separability is indeterminate: they demonstrate the reciprocity in the relation between the accounting expression and the economic content. The accounting practitioner cannot follow an extra-accounting guidance, based on some natural foundations (such as physical or legal), in its articulation of the firm to individual assets. This is the manner in which one should understand the arbitrariness of the sign: "Not only are the two domains [sounds and ideas, or expression and content] that are linked by the linguistic fact shapeless and confused, but the choice of a given slice of sound to name a given idea is completely arbitrary" (*Course*, p. 113). If indeed accounting recognition's starting point is the whole and not its parts, and if its fundamental operation is one of reciprocal co-constitutive articulation rather than a passive one-sided representation, then the category of independent asset – its stable 'existence' – is problematised.

Under the proposed theorisation, the objective of the statement preparer is not to get as close as possible to a 'faithful representation' of the 'economic reality' of individual resources. Indeed, by now we know that this is an ideal and unsustainable goal (e.g., Hines 1988; Robson 1999; Chapman *et al.* 2009; Quattrone 2017). The objective of the preparer is different: it is to articulate the firm. Crucially, the latter framing of accounting recognition – *recognition as articulation* – entails a more significant judgment than the former – *recognition as representation* – for two reasons. First, in terms of the locus of judgment, articulation involves the (conceptually) earlier stage of constitution accounting assets and not merely the assessment of certain given delimited resources. Second, the scope of judgment under the proposed framing is broader. When the focus is on threshold criteria, asset recognition is a question with a dichotomous 'Yes or No' answer, and therefore the scope of judgment

involved in it is perceived to be narrower than in that of measurement, which provides an infinitesimal spectrum of values. However, understood as articulation, recognition also entails a continuum of options. With the plasticity of asset boundaries comes more discretion that must be explicated rather than glossed-over.³⁰ Put differently: the flexibility in financial accounting is not only in the numerical measurement of items, such as assets, but also in determining – recognising – the items to be measured and their boundaries in the first place. The semiological concept of reciprocal articulation surfaces the latter, less-noticed, aspect in the accounting judgment.

6.3. Two dimensions of articulation: standard setter and statement preparer

The above analysis of recognition practices with the semiological lens also brings to light a consequential distinction between two levels of separability, which has not been sufficiently recognised in the literature. On the one hand, the system as a whole is articulated to general categories by the community, and specifically – by the standard setter. On the other hand, each specific statement/firm is articulated by the statement's preparers to specific assets/resources. The community and its individuals exercise the power of articulation in different, though related, levels.

An illustration of articulation at the level of the system is the relation between general goodwill and specific intangible assets. The 2004 revision of IAS 38 has

³⁰ This alternative approach better suits the ultimate objective of financial reporting as envisioned by IASB and its American counterpart: investment decision-making depends on investors' "assessment of the amount, timing and uncertainty of (the prospects for) future net cash inflows to the entity" (IASB, 2010a and FASB, 2010, para. OB3). Note: the investor's interest is in the net cash flow to the entity as a whole; not the cash flow of each individual asset.

been a re-articulation of accounting's general categories: parts of what previously would be considered general goodwill have been thereafter recognised as separate intangible assets. This re-distribution of the conceptual landscape has been a result of the changing social and economic environment, specifically the rise of mergers and acquisitions activity in the Information Technology sector (see IAS 38.BC7). This is the kind of separability that Power (1992), Napier and Power (1992) and Sherman and Power (1994) are discussing: the manner in which general categories (such as brands) come into existence in professional communities. On this level, articulation is closely related to categorisation, a process which is never neutral and entails choice.

As Young and Williams (2010) make clear, "Categorization and classification, the sorting and ordering of things and events, are at the heart of accounting standard-setting" (p. 510). Such classifications bring certain assets into existence and deny the existence of others, through decisions of similarities and differences that are never neutral or necessary. Accounting classes are constructed and not independent of particular perspectives, interests and values. Similarly, Grojer (2001) discussed the programmatic and cultural aspects of classifications of intangible assets, which cannot be assumed to be scientific or fixed (also in Hatherly *et al.*, 2008; Gallhofer *et al.*, 2015). These and others have focused on the constitutive power of open-ended and ambiguous accounting classifications (and see also Carruthers, 1995; Suzuki, 2003; Quattrone, 2009; Mennicken and Miller, 2012). Similarly, Rowbottom *et al.* (2016) have shown how taxonomies of reporting practices (e.g., XBRL) can shape rather than simply represent practices. This performativity of classification is concisely captured in their paper's title: it is the tail wagging the dog.

However, reciprocal articulation is not merely systematic classification: articulation is also at the level of the particular statement. Semiology adds the operation of statement's articulation to that of general taxonomy (Barthes, 1968, p. 57). In fact, for both Saussure and Barthes, the articulation of the statement is a pre-condition for the articulation of the system, as the general categories are the product of recurring use by individual speakers. The categories are not pre-determined in the system to be simply appropriated in particular statements. Development comes firstly from the use – from *parole*: “All innovation comes about through improvisation, when someone speaks” (*Writings*, pp. 64-65). This is one of the delicate and important points emphasised in Saussure’s manuscripts: “the speaker is not just the performer of some pre-arranged programme...but the organizer of the activity that brings the sign into being as a sign” (Harris, 2003, p. 245; and see similarly in Bouquet, 2004, pp. 212). The statements are de-composed (articulated) to elements by individual speakers, which are then grouped into general categories (*Writings*, p. 11; Barthes, 1968, p. 48). Use – the speech (*parole*) by speaker – is what causes the language system (*langue*) to evolve (*Course*, p. 19). There are no (systematic) forms without (individual) use (*Writings*, p. 15). In that sense, each speaker is both a user and a creator of the language system, in an iterative, complementary, historical process. As the French linguist and semiologist Benveniste (1971) concludes: while the linguist is led to start the analysis from the elementary units and the sentence is the final level, for the speaker the analysis starts, on the contrary, with the sentence. This is a crucial point:

It is in discourse, realized in sentences, that language [*langue*] is formed and takes shape. There language begins. One could say, in imitation of a classical formula: nihil est in *lingua* quod non prius fuerit in *oratione*

[Nothing is in the *language* that was not first in the *speech*] (Benveniste, 1971, p. 111).

The analysis of accounting recognition standards has similarly shown how the constitutive and malleable reciprocal articulation is not only in the standard-setter's classification; it is also in the preparer's delimitation of the specific statement, the specific cash flow, the specific firm. IAS 38 is not only an example of the standard-setter's re-articulation of the system; it is also an example of the manner in which each preparer retains the discretion to articulate the specific firm. As elaborated section 5, the preparer has multiple points of discretion to decide how to delimit the cash flow: an intangible asset can be separable with other related assets, there are various ways to delimit mixed assets (with tangible and intangible components) and the expansion of an asset's boundaries to include subsequent expenditure is a matter of judgment. As shown in the previous section's analysis and in *Table 1*, the reciprocal judgment-based articulation on the individual firm level is evidenced in all other main asset types as well.

The distinction between the two levels of articulation is important to the understanding of the distribution of power in financial accounting between the community and its individuals. Sherman and Power (1994, p. 480), for example, frame the professional struggle over the legal and accounting recognition of intangible assets, through the fundamental understanding that 'naming things bring them into being'. With semiology, this paper refines this insight: in financial statements the power of bringing assets into being is distributed between two interrelated arenas, the standard setter and the individual preparer.

Furthermore, the framework of a two-level reciprocal articulation may be enlightening in accounting even more than in natural language, because the financial statement is captured – summarised – in compound values, such as 'total assets' or 'shareholders' equity'. The compound value, which involves measurement as well as recognition, has no clear parallel in a linguistic statement. This is the distinct characteristic of financial-numerical semiology, which is serial and not merely oppositional (see Barthes, 1968, p. 80). With such aggregate values, the accounting speaker is more powerful in its delimitation of the financial statement than the language speaker is in its delimitation of the sentence.

7. Conclusions

The IASB's conceptual framework project is a good opportunity to rethink fundamental accounting concepts. Recognition is one such concept, which has been challenged in the literature in the restricted context of intangible assets. The present paper has broadened such critical investigation of accounting recognition in three different aspects: its perspective (or object of enquiry) has been the standard-setter's prescriptions, which are under-investigated (Barker and McGeachin, 2015); its analysis has been systematic – with respect to all main asset types and not merely intangible assets; and its interdisciplinary approach has gone beyond the traditional resources of accounting theory and has used the lens of semiology's theory of social sign systems.

With such lens, analysis and perspective, the paper has shown that the formal recognition criteria – the probability and reliability thresholds – do not justify the distinct category of asset recognition, separate from the measurement category. These thresholds have either been explicitly excluded or implicitly

made redundant. Instead, the paper's analysis has shown that underneath the declaratory narratives, the core of asset recognition practices prescribed by IASB is the concept of separability. Accounting assets come to life – are being recognised in the statement – mainly through their separability from the firm as a whole.

Putting separability at the crux of asset recognition in financial statements is in line with semiology's overarching theme of reciprocal articulation. Social sign systems, argue Saussure and Barthes, operate not through expressions that allegedly represent, more or less faithfully, existing elements of content, but rather by way of finer articulation, delimitation, segmentation of both expression and content. They operate not merely by composition of given elements, but firstly by de-composition – the act of 'cutting-up' – that produces the elements in the first place: "The language is an intermediate object between sound [expression] and thought [content]: it consists in *uniting both while simultaneously decomposing them*" (Barthes, 1968, p. 56).

In proposing reciprocal articulation as a conceptual instrument or device for the investigation and theorisation of accounting recognition, and in applying it to the analysis of IASB's recognition prescriptions, three main interrelated insights have surfaced. First, separability is at the core of recognition and its plasticity is pervasive: assets of all types – including tangible assets – have undetermined boundaries. The previous literature's assumption that separability is not relevant to, or easily determinable with respect to, tangible assets misses a nuanced but critical Saussurean distinction: the objects of financial statements are not physical resources ('referent'); they are conceptual elements – expected economic benefits ('signified'). The rigid boundaries of the physical referent have no bearing on the flexibility of the boundaries of the

conceptual signified. Separability is malleable and underdetermined for all assets.

Second, if separability-as-articulation is the heart of accounting recognition, the preparer's judgment is – and must be explicated as being – not about assessing existing distinct items and their meeting of certain thresholds, but primarily about the articulation of the firm to tentative assets. This is not so much a judgment about the accuracy of representation of elements, as it is a judgment about constituting such elements in the first place. Recognition is not a Yes/No decision regarding representation; it is a decision that involves a continuous gamut of options regarding articulation. While the focus in financial accounting is frequently on the composition of the statement, semiology reminds us of the power of de-composition, which is at the centre of recognition. Or, in summary, to the understanding of the 'plasticity of valuation' (Mennicken and Power, 2015), this paper adds insight into the plasticity of recognition.

Third, with the emphasis that articulation takes place in two dimensions – the system and the statement – this paper complements prior research on the constitutive nature of financial accounting classifications. With Saussure and Barthes, the constitutive power of accounting is also in the specific articulation of the individual statement, firm, cash flow. As general classifications have shown in previous literature to be malleable and lacking natural or rational anchors, so is preparers' segmentation of the statement/firm/cash flow. Both articulations are indeterminate by extra-accounting factors (physical, legal or economic), and both must be explicated if one wishes to understand the power – of the standard setters and standard-users – involved in the constitution of assets.

More generally, the study adds to the diverse debate on the insufficiency of representation in accounting. It shows that such insufficiency need not result with abandoning the conceptualisation of accounting as a knowledge-production technology. It 'merely' requires alternative non-representational, procedural (Quattrone, 2015a) frameworks that nevertheless exhibit regularity and consistency. The concept of reciprocal articulation opens the ways for such a framework.

In conclusion, the proposed theorisation of recognition as articulation finds more support in IASB's prescriptions than the conventional theorisation of recognition as representation. With different theorisation come different challenges. With this paper's framework, attention is directed not to the (frequently discussed) impossibility of correspondence, but rather to the multiple possibilities of delimitation. The problematics of signifying – accounting signifying included – are not so much in the inability to provide an exhaustive representation that does not leave anything 'outside of the picture'. They are rather in the immanent indeterminacy and discretion that are involved in carving out a picture – which is merely one out of many potential pictures. Such a reframing of the challenge of recognition is not only more realistic, but it also opens up, in critical but nevertheless pragmatic terms, a space for better understanding the power involved in the production of the balance sheet.

The Semio-Logic of Financial Accounting: The Non-Essence Underlying the IFRS Balance Sheet

Abstract

This paper engages the debate on the non-essence and power of accounting (Miller and Napier, 1993; Miller and Power, 2013) with respect to one particular accounting technology – IASB’s statement of financial position, and through one specific lens – Ferdinand de Saussure theory of social sign systems: semiology. While the debate’s focus has been so far on the contingent socio-historical settings of accounting, i.e. from a genealogical perspective, this paper proposes a complementary semiotic perspective on the nature of accounting as a procedural signifying technology. It is shown how semiology provides a meaningful delineation of financial accounting which is not decontextualized from its social environment, especially in light of semiology’s distinct theorisation of the non-essence of the social sign. Specifically, IASB’s recognition procedures are shown to manifest the semiological principle of ‘reciprocal articulation’, where economic resources and accounting expressions are mutually constituted by delimiting the resource/asset from its broader category (e.g., intangible assets from goodwill), as opposed to a representation of pre-existing resources. IASB’s measurement procedures illustrate the principle of ‘value constellation’, where the asset’s value is not intrinsic but rather a relational product of differentiation from other values in the system (market) and of interrelation with other values in the statement (firm). This theorisation contributes to the

literature by explicating a distinction between essence and logic: the building blocks of the balance sheet – asset values – do not have essence, but the statement's operation within the accounting system does have a logic – a non-substantive, procedural logic (Quattrone, 2015a). The paper offers a set of conceptual instruments as the non-substantive *logic* of the balance sheet as a *sign* technology: its *semio-logic*. By this, it sheds light on the relation between accounting as a social sign technology and the contexts in which it operates and on the relation between accounting's non-essence and its power.

Keywords: articulation, measurement, procedural logic, recognition, semiology, value constellation.

1. Introduction

Sociologically and historically informed studies have demonstrated how accounting has no essence, no substance (Miller and Napier, 1993).³¹ Accounting is not a homogenous immutable category independent of its socio-historical context. It “is not a naturally occurring phenomenon, it is man-made” (Nørreklit *et al.*, 2010, p. 734). Rather than fixed and stable attributes, there are merely contingent accounting ‘constellations’ (Burchell *et al.*, 1985), ‘ensembles’ (Miller and Napier, 1993), ‘complexes’ (Miller and Power, 2013), ‘assemblages’ (Mennicken and Power, 2015) – all being the malleable product of specific social settings in particular historical moments. These studies have also emphasised that, notwithstanding its lack of essence, accounting exerts significant power over its social surroundings, so significant that it “has

³¹ The terms ‘essence’ and ‘substance’ are used interchangeably in this paper.

become perhaps the most powerful system of representation of social and economic life that exists today" (Miller and Power, 2013, p. 563). This conceptual paper aims to shed light on this non-trivial juxtaposition of accounting's non-essence on the one hand, and its distinctive power on the other hand. This is done not from a historical-genealogical perspective as in the above studies, but rather from a semiotic, procedural (Quattrone, 2015a), perspective. Such investigation is made with respect to one particular accounting technology – the statement of financial position (the 'balance sheet') under contemporary IFRS principles – and through a specific semiotic lens: Ferdinand de Saussure's semiology.

Semiology, defined both as a theory of social sign systems and a theory of co-systemic relational values, is suitable for the above task for two main reasons. First, semiology provides a meaningful delineation (Gallhofer *et al.*, 2015) of financial accounting without decontextualising it from its social surroundings. Semiology's boundaries, when compared to other traditions of semiotics, are limited to purposeful social sign systems operating through statements comprising multiple terms (value-bearers), just as in financial accounting. With such a focus, semiology would theorise financial accounting as a social phenomenon but, importantly, it would also surface what distinguishes financial accounting from other social phenomena.

Second, semiology is illuminating for the current discussion because at its core is a non-essentialist understanding of the operation of social sign systems, which has been ground-breaking in the conceptualisation of natural language. Put differently: semiology provides a lens for the investigation of the above-mentioned juxtaposition between the non-essence and distinctive power of the social sign, whether it is the linguistic sign or, as shown in this paper, the

accounting sign. It can provide a link between financial accounting as a set of signifying principles, and the social, organisational and institutional spheres shaped by accounting and shaping it.

Treating the accounting sign as a distinct phenomenon – keeping the problem of the sign ‘on its toes’ (Joubert, 2006, p. 51) – is important especially today, when the world’s most influential accounting standard setter is offering its own conceptualisation of accounting practices in the form of the Conceptual Framework Exposure Draft (IASB, 2015; *CFED*). The paper will therefore make the argument, that if there is one realm, other than that of natural language, that may benefit from the transformative principles of Saussure’s original carefully delineated semiology, it would be the realm of financial accounting.

With this a theoretical framework, the paper reconstructs two interrelated conceptual instruments (Robson, 1991, p. 565) for the investigation and theorisation of the non-essence of the balance sheet: *reciprocal articulation* and *value constellation*. These are drawn from Saussure’s influential teachings – the *Course in General Linguistics* (2011[1916]; the *Course*) – and his more recently published manuscripts (2006; the *Writings*), as well as from the works of his advocate Roland Barthes (1968, 1993, 1994, 1997). The paper assesses the manifestation of these principles through IASB’s prescriptions for asset recognition and measurement practices, which are two of the most fundamental operations in financial accounting. With respect to recognition, the principle of *reciprocal articulation* serves as an alternative to that of one-sided representation. Under such a principle, the ‘signifieds’ – i.e., economic resources – and the ‘signifiers’ – i.e., asset entries in the balance sheet – are a product of performative judgment-based articulation or delimitation of the resource/asset from its broader category. In accounting, as in language,

expression is not a passive representation of pre-existing content, but rather content and expression are mutually constituted. As to accounting measurement, with semiology's concept of *value constellation*, the value of each asset in a financial statement is not a product of natural or rational anchors but rather is derived from a constellation of other values-bearers. It is merely a product of differentiation from other values in the general system – the market and interrelation with other values in the specific statement – the entity.

From these two conceptual instruments emerges a distinction between essence and logic in sign systems in general and in financial accounting in particular. While accounting has no essence (Miller and Napier, 1993), the statement of financial position may nevertheless have a logic: a non-substantive logic (Quattrone, 2015a). Such logic is not anchored in pre-given substantive knowledge categories, but rather in procedural knowledge-*production* operations. This is the logic of reciprocal articulation that produces relational value constellations. Explicating such a logic is important also for the understanding of the power implicated in financial reporting. The value constellation underlying accounting measurement adds another layer to the malleability of 'accounting constellation' (Burchell *et al.*, 1985). The reciprocal articulation underlying accounting recognition – accounting's power to articulate the firm and its general cash flow – adds another layer to accounting's 'productive force' (Miller and Power, 2013). Put differently: the semiological characteristics of the accounting technology take part in facilitating the "accounting–society interpenetration" (Burchell *et al.*, 1985, p. 385).

The remainder of this paper is organised as follows. The next section depicts the focus of the extant literature discussing the non-essence of accounting. The

third section introduces the theoretical framework – semiology – and its fit to financial accounting. In the fourth section the paper highlights the distinctive perspective offered by semiology, i.e. its theorisation of the non-substance of sign systems. The fifth and the sixth sections provide semiology’s specific non-substantive logics – reciprocal articulation and value constellation (respectively), illustrate their manifestation in IASB’s recognition and measurement guidance, and discuss the implications for our understanding of the non-essence and power of accounting. The final section provides concluding notes.

2. Positioning in literature: the non-essence of accounting in its socio-historical contexts

2.1. Accounting’s non-essence from a genealogical perspective

Accounting’s interrelations with its social, organisational and institutional context have underlain a major research strand in accounting scholarship for more than three decades. From this perspective, accounting cannot be a fixed and stable phenomenon to be defined by intrinsic characteristics. This fundamental understanding is at the core of the seminal paper of Burchell *et al.* (1985) and of the notion of ‘accounting constellation’ which they introduce. Accounting is a malleable constellation of multiple social factors of various kinds in particular time-space settings. Almost thirty years later, Miller and Power’s (2013) notion of ‘accounting complex’ shares this approach. Accounting is a fluid “complex of capital market actors, organizations and ideas” and therefore “there is no accounting logic as such, there is no accounting essence” (*ibid*, p. 592).

What does it mean, more specifically, that accounting has no essence? In what sense it is flexible and malleable? Even if the discussion is restricted to financial reporting, there are different aspects to this malleability. One such aspect relates to the multiplicity of objectives and users of financial statements. Thompson (1987), for example, stresses the different purposes that financial statements may serve, which imply that specific accounting innovations are political projects. Similarly, Mattessich (1995) demands attention to the “broad range of alternative purpose-oriented models to the users of accounting information” (p. 262). Young (2006) shows how standard setters make up particular users and privilege particular perspectives (i.e., ‘rational’ economic decision-makers) on the account of others, as “ideas, classifications, concepts and goals...are ours rather than nature’s” (p. 581). Young and Williams (2010, p. 510) likewise emphasise that “standard-setting is a process through which some values/perspectives are valorized” while others are excluded. These and other scholars have emphasised, that if under a certain regulatory regime, certain stakeholders (investors) are served and others (e.g., environmental stakeholders) are ignored, this has nothing to do with an alleged essence of accounting but rather with the political power of the relevant interest groups.

Another aspect in the non-essence of financial reporting is the vagueness and openness of accounting standards, especially in an era where the standard setter is providing general principles rather than specific rules, as is the explicit policy of IASB. Accounting principles intrinsically allow space for interpretation, and their practical implementation always involves socially-historically situated factors. For example, professional institutions (e.g., valuation consultants) and the trust they generate, may determine what is a legitimate accounting policy, not less and perhaps more than the accounting principles prescribed by the standard setter (Power, 1992). To this interpretive

openness, Evans *et al.* (2015) add the ambiguity of professional linguistic terminology and its never-neutral translations to multiple languages. In opening a wide range of possibilities, interpretations and translations can also be exploited (p. 24).

A third aspect of the non-essence of accounting is its multiple and ambiguous theoretical foundations. Zambon and Zan (2000) focus on the variety of finance theories as a source for 'accounting relativism' producing different representations and measurements in different national regimes. Accounting measurement cannot have a unified essence, in light of the lack of a common theory of the firm. They argue that "accounting can potentially serve many interests as a tool of power, because its knowledge base has an ambiguous theoretical status" (p. 800).

Most significantly, the literature's discussion on non-essence has a dominant genealogical dimension, where the idea of accounting as an indefinable homogeneous category is fundamentally challenged. In Burchell *et al.* (1985), the emergence and decline of value-added reporting in the United Kingdom has been used to illustrate how accounting is "a product of a complex interplay of institutions, issues and processes" (p. 408). They have used "a historical genealogical approach as a device to avoid the assumption that accounting has some essential role or function" (p. 409). Accounting principles and techniques are not fixed, anchored in inherent characteristics, but rather are adopted, maintained, or lose attractiveness with policy-makers and practitioners based on various non-accounting factors of different types and orders. Accounting therefore "can be evaluated in terms of what it is not" (Hopwood, 1987, p. 2010). In Robson's (1991) terms, the focus should be on the arenas of accounting change: "The genealogical method is consistent with a rejection of

a supposed 'essence' (or unchanging 'identity') to the practice of accounting" (p. 549).

Miller and Napier (1993) proposed a similar approach, as evidenced in the title of their paper – 'Genealogies of calculation'. In studying the conditions for the emergence of four significant accounting techniques – double-entry bookkeeping, standard costing, discounted cash flow and value-added accounting – they have emphasised both the changing nature of accounting techniques – the lack of a fixed essence to accounting ensembles – and their power. They have shown how "'successful' accounting methods transform the entities and practices of which they provide a calculative knowledge" (*ibid*). Similarly, Mennicken and Power (2015) have illustrated the malleability of accounting regulation with respect to four instances of accounting innovation and dissonance. Their argument on the 'plasticity of accounting' is made mostly by the study of the emergence of and change in regulatory and professional accounting techniques.

Miller and Power (2013) share this emphasis on the changing and multifaceted nature of accounting. Political and institutional powers are reflected in practices, ideas and rationales (e.g., the market rational), which comprise the 'accounting complex' in each point in time. A common characteristic of this strand of research, is that the unit of analysis – 'accounting' – is very broad and heterogeneous. Accounting is:

an assembly of very different elements: ideas, laws, bureaucratic instruments, spreadsheets, reports, standards, and registers, not to mention accountants and other human agents (Miller and Power, 2013, pp. 588-9).

With such broad and heterogonous objects of enquiry, where “the important point...is that the components that are connected are very different kinds of things” (*ibid*, p. 594), accounting cannot be conceived to have uniform properties. It must be emphasised though, that the non-essence here is not (or, at least not primarily) an attribute of a specific accounting technology, but rather of the overarching, always-changing and undefinable (non-)category of ‘accounting’: “there is no...invariant object to which the name ‘accounting’ can be attached” (Miller and Napier, 1993, p. 631).

2.2. Attention to the specificity of financial accounting technologies

From Burchell *et al.* (1985) through Miller and Power (2013), a crucial point has been that the interaction of accounting with its social environment is a ‘two-way street’. Not only that accounting is shaped by its context, it also has agency and power over such context as it “can mobilise and change the world of the social” (Burchell *et al.*, 1985, p. 382). Accounting and its environment are mutually dependent, in a manner that is best describes as “accounting – social interpenetration” (*ibid*, p. 385). This characterisation of reciprocal relation between accounting and its social context is also highlighted by Miller and Power (2013) who propose the notion of ‘productive force’ to illustrate how:

accounting practices recursively and repeatedly constitute economic spaces and entities, mediate ideas and instruments, link together different arenas and actors, provide the dominant narratives of performance evaluation, and constitute the economic selves who expand energy in attending to, and being oriented by, its practice (Miller and Power, p. 587).

In fact, they argue, accounting is “perhaps the most powerful system of representation of social and economic life that exists today” (*ibid*, p. 563). Furthermore, Miller and Power make a specific reference to one particular

accounting technology – the balance sheet – and note that it “is one of the most powerful institutions of our time” (p. 584). There seem to be a tension here that requires further attention. Accounting has no essence in the sense that it is pliable – defined and redefined on an ongoing basis by its social and organisational settings, but it is nevertheless a powerful system of representation – perhaps more powerful than other systems – which implies at least a certain degree of distinctiveness.

However, the distinctiveness of the accounting system – and specifically of financial reporting as a set of accounting technologies – has gained much less attention in critical and interdisciplinary accounting studies when compared to its portrayal as a sociological phenomenon. Chapman *et al.* (2009), for example, emphasise that “Accounting has finally... arrived *back* on the social science agenda” (p. 3). But with that, something else happened: “Accounting lost some of its apparent uniqueness” (p. 13). Napier (2006), also with a bird’s eye perspective of a review paper, observes that a “movement such as the new accounting history that emphasises the social, organizational and behavioural has in the past tended not to have much to say about financial reporting or fundamental notions of accounting theory” (p. 466).

Lukka and Vinnari (2014) have highlighted a related concern that sometimes theories imported from other fields are not unique to accounting, “but are of such a general nature that they can just as well be employed to explain various other social phenomena. This creates ambiguity in terms of whether or not these studies actually contribute to management accounting knowledge” (pp. 1313-4). These concerns have also been raised in the context of financial accounting. Cushing (1989), for example, described the neglect of “the fundamental issues that distinguish accounting from other fields” and

concluded that “this suggests that accounting’s present crisis is not only severe, but possibly fatal to accounting as a viable branch of knowledge” (p. 31; see also Rutherford, 2010).

More recently, Gallhofer *et al.* (2015) have raised the necessity of treating accounting as both a specific phenomenon and an open one. They suggested “to re-consider the delineation of accounting”, not in order to de-link it from that which constructs it but rather precisely in order to gain “a richer appreciation of the potential role of accounting(s) *vis-à-vis* praxis” and to advance its understanding “as contextually situated” (p. 849). While acknowledging the need to keep accounting open, Gallhofer *et al.* (2015) emphasise the frequently neglected disadvantage of having so vague and broad boundaries to the extent that accounting would include “almost everything” and would thereby lose its specificity (p. 854). We need therefore a delineation of accounting that would characterise it as a social phenomenon but one that is also demarcated from other social phenomena (p. 855).

These calls to pay attention to the specificity of accounting technologies are particularly important in the context of financial reporting. Recent quantitative and qualitative reviews (Brown and Jones, 2015; Whittington, 2015a) show, that interdisciplinary accounting studies have not put much emphasis on accounting concepts such as those underlying financial reporting (see also Robson *et al.*, 2017). Some have argued more strongly that the accounting technology, conceived as a system of interrelated principles of recognition, measurement and presentation, has been to a certain extent black-boxed in the predominant academic communities (Rutherford, 2010; see also: Kaplan, 2011; Barth, 2015). However, the specificity of the accounting technology – its nuts and bolts – is crucial for the understanding of the

accounting–society interpenetration; for the understanding of “how the accounting infrastructure...brings the economy into being” (Vargha, 2016, p. 2). As Mennicken and Millo (2017) argue, research on the socio-historical context of accounting should be supplemented with an attention to the accounting technologies themselves, including their models, concepts and infrastructures.

Putting more emphasis on the distinctive characteristics of financial accounting technologies does not necessitate a retreat from an interdisciplinary and critical approach. In the context of financial reporting, an interdisciplinary approach has so far been applied mostly in socio-political analysis of standard-*setting* (as also shown in the review of Robson and Young, 2009). In complementing that approach, this paper’s motivation is to apply an interdisciplinary strategy in the conceptual unpacking of the financial accounting principles themselves, and specifically in the most traditional realms of recognition and measurement techniques. The need for such an approach has been recently recognised even by thought leaders from the more traditional research schools. Barth, a former standard setter and the incoming editor of *The Accounting Review*, has called for the use of complementary disciplinary fields beyond economics, finance and psychology, in financial accounting research: “Broader and new perspectives can rejuvenate a field and enrich it” (2015, p. 504). The following sections make the argument that semiology qualifies as such a ‘broader and new perspective’, that treats accounting as both open to its environment and distinctive in its operation.

3. 'Accounting Semiology': delineating financial accounting with semiology

While sharing important characteristics with other social phenomena, financial accounting is also a distinctive phenomenon. In Miller and Power's (2013) terms, it is a system of representation (p. 563), in Gallhofer *et al.*'s (2015) terms it is a "representation (descriptive or prescriptive) that involves the giving or rendering of an account" (p. 855), and in Llewellyn and Milne's (2007) terms it is a "specialised form of discourse" that relies on codified "numerical representation" (p. 806). To avoid the laden terminology of 'representation' (and as shall be further discussed later in the paper), a more neutral characterisation of financial reporting would be as a sign system, as indeed a sign is not necessarily representational (Thompson, 1987, p. 533). More specifically, financial reporting may be conceived as a social technology designed to produce and communicate constative statements comprising of multiple value-bearers (e.g., assets and liabilities).

A disciplinary lens that is aimed to shed light on financial reporting must take such specificity into account. This is particularly the case if the research is oriented to accounting policy issues, so that "the practical and policy judgments made in real world accounting practice [could] be interpreted and understood by viewing them from a specific paradigmatic base" (Nørreklit *et al.*, 2010, p. 736). Such specificity though should be accomplished without losing reflexivity and openness. As Quattrone (2000) has argued, accounting "is incomplete... Its understanding requires an external and bigger system which includes this system of knowledge and which is incomplete itself. In other words, this system is in need of a critique" (p. 146). Semiology, the remainder of the paper will show, meets these requirements and may serve to

highlight the delicate balance between the openness and distinctiveness of one important accounting technology: the balance sheet. The following subsections will support the meaningful delineation of financial accounting (Gallhofer *et al.*, 2015) within semiology as a wider system of knowledge (Quattrone, 2000).

3.1. Semiology's boundaries: semiology is narrow enough to be meaningful

Saussure “is generally acknowledged as the father of modern linguistics” (Gordon, 2003, p. 993), but some of his principles have been expanded well beyond linguistics and have been used, directly or indirectly, in other fields such as sociology, arts and the humanities (see, for example, the semiological origins of Actor-Network Theory as acknowledged by Latour, 1996 and Law, 1999, 2007, and as analysed in Hostaker, 2005 and Beetz, 2013). However, the original boundaries of Saussure’s semiology – when compared to its contemporary sign theories (referred to under the more general title ‘semiotics’) and to its successor frameworks (such as Structuralism and Post-Structuralism), are quite narrow. Saussure’s interest is only in social sign systems and not natural ones, and even more specifically: only where the signifying process is purposeful and not incidental. Financial accounting seems to fall within these narrow boundaries. In order to further distil semiology's meaningful fit to financial accounting, the following paragraphs draw certain distinctions between semiology and other influential semiotic approaches.

First, a distinction must be made between semiology and sign theories that do not engage exclusively with social systems. Most important in this regard is the semiotics introduced by the American pragmatist philosopher C.S. Peirce.

Peirce's semiotics and Saussure's semiology have been the two most influential competing sign paradigms of the 20th century. But for Peirce, everything – from mathematics to ethics, from gravitation to phonetics, from economics to astronomy – can be studied through semiotics (Cobley, 2001, pp. 8-9). He discusses, for example, natural signs, such as high temperature being a sign of illness. Similarly, Sebeok's vast semiotic project includes the investigation of nonverbal interactions between animals as well as between body cells and organs (e.g. Sebeok, 2001). Saussure's semiology is much more restricted: the sign system here is a social fact. The community constitutes the sign system, and the sign system is destined to the community; "this community environment changes everything for the sign system" (*Writings*, pp. 202-3). The sole role of Saussure's sign system is to facilitate interpersonal comprehension (*Writings*, pp. 120, 121, 203).

Second, a semiotician such as Umberto Eco discusses social signs, but not exclusively purposeful sign systems. He proposes "to define as a sign *everything* that, on the grounds of a previously established social convention, can be taken as *something standing for something else*" (1979, p. 16). Artefacts that have functions other than conveying a message, such as certain style of clothing or furniture, would be included in his version of semiotics as they also have, as a by-product, a signifying effect. In Roland Barthes' terminology, these would be, 'sign-functions' (1968, p. 41), which he differentiates from 'pure signs' whose sole function is to signify. The scope of Saussure's theory is, again, more restrictive. Semiology is limited to *purposeful* sign technologies: "the sign can only begin to be truly known when it is understood that it is something not only transmissible, but intrinsically *destined to be transmitted*" (*Writings*, p. 154). This character of the system relates also to the nature of its signs: semiology applies only to arbitrary signs, where the relation between

the signifier (an expression) and the signified (a concept) is neither natural nor purely rational (*Course*, pp. 68, 78; *Writings*, pp. 145-149, 238-239).

Indeed, the term 'sign' is vague, malleable and multifaceted, and so is the scope of sign theories. At one extreme, everything – cloths, food, furniture and kinship relations – may be considered as signs: “as soon as there is a society, every usage is converted into a sign itself” (Barthes, 1968, p. 41). Saussure’s semiology is at the opposite extreme – it is restricted to signs that are social, systematic and purposeful. Financial accounting – a “purposeful process of communication” (Nørreklit *et al.*, 2010) – is situated within its narrow boundaries. Its fit to semiology is a meaningful one.

3.2. ‘Accounting Semiology’: semiology is broad enough to capture accounting

Saussure’s semiology is restrictive in its scope when compared to other semiotic traditions. But is it not too narrow? Is it not merely applicable to natural languages? In his manuscripts, Saussure makes clear that although his investigation has been into language, its envisioned framework is broader: “Language is merely a specific case of the theory of Signs... within the general theory of signs the specific case of vocal signs might not be incalculably more complex than all the specific known cases, such as writing, numerals, etc.” (*Writings*, p. 154). Nevertheless, in the opening words of his *Elements of Semiology* (1968), Barthes accounts for the failure of Saussure’s semiology to take a more significant role in social theory, by arguing that all meaningful social sign systems are ultimately reduced into the human language. We are therefore left with linguistics and no need or interest to discuss a broader semiology.

Financial accounting rebuts Barthes' conclusion. It is a significant purposeful social sign system, which may not be reduced to words. Although financial statements include words, the accounting sign is fundamentally numerical in the sense that it is subject to mathematical operations, and particularly to aggregation, which requires a common denominator. Financial accounting requires not only categorisation, but also statement totals (e.g., *CFED*, paras. 5.2-5.4, 7.8, 7.14-7.15). The aggregation which necessitates a reduction to a common-scale (commensurability) is unique to accounting when compared language; measurement is unique to a financial-numeric semiology: an *Accounting Semiology*.

Accounting is situated in this narrow gap between semiology and linguistics. *Accounting Semiology* is a distinct semiology, as it stands to Benveniste's (1981) non-redundancy criterion for semiological systems: we are not able to say 'the same thing' with language and with financial accounting; the two are not mutually interchangeable. The gap between semiology and linguistics – narrow as it may be – allows the positioning of financial accounting not as subordinated to, or a second-order of, natural language, but rather in parity with language.

With this disciplinary positioning – or delineation (Gallhofer *et al.*, 2015) – of financial accounting, the paper proposes to harness semiology in the study of the *numerical* parts of corporate reports. In previous research semiology and other semiotic approaches have played a role mainly in analysing narrative or visual illustrations in non-accounting parts of corporate reports (e.g., Malsch and Gendron, 2009; Breton, 2009; and Davison 2011a,b, 2015), or in problematising the terminology used in accounting standards (e.g. Walton, 1993; Parker, 1994; Evans, 2004). More generally there is a rich literature "on

written accounting communication via public written narratives outside the audited financial statements” (Merkel-Davies and Brennan, 2017, p. 437). The current paper, on the other hand, proposes to use semiology in conceptualising the operation of the core financial statements, and specifically the balance sheet.

It should be noted, that the paper offers another dimension of expansion in the use of semiology in accounting. The engagement of the extant accounting literature with Saussure’s semiology is limited in scope and depth, with references to his work mostly as a background for the frameworks of later thinkers (see, for example, in Macintosh, 2002, 2003; Macintosh *et al.* 2000; McKernan, 2007, 2011; Graham, 2008; Hamilton and Ó hÓgartaigh, 2009). This is not an untypical approach to the indirect and loose use of Saussure beyond linguistics. One reason for that may be that Saussure's *Course in General Linguistics*, posthumously edited from his students' notes, has been the sole source in previous accounting literature (e.g., Tinker, 1991). However, a more systematic assessment of semiology's potential in accounting requires to go beyond the *Course* and into Saussure's manuscripts, some of which have only recently been published. The *Writings* emphasise the social, historical and critical in Saussure's thought, themes for which he was frequently misjudged by some of his influential interlocutors.³²

More generally, the publication of the *Writings* has triggered a revived interest in Saussure’s thought in the last decade and it strengthens the claim for semiology’s relevance as a conceptual lens in the study of purposeful sign

³² See Agamben's (1993) critique of Derrida's misreading of Saussure and his neglect of Saussure's manuscripts and their importance (pp. 152-158). See similarly in Harris (2003), Joubert (2006), Daylight (2011) and Attell (2015).

technologies. As has been argued throughout this section (and will be further argued in the following sections), if there is one discipline, alongside linguistics, that may benefit from semiology's original carefully delineated boundaries, it would be financial accounting.

4. Semiology's offering: non-substantive theorisation of sign systems

As has been shown in the previous section, the delineation of financial accounting (Gallhofer *et al.*, 2015) with semiology is a meaningful one, and the latter may therefore be a productive lens in the study of the former. Specifically, semiology is best positioned to shed light on one particular aspect of a particular accounting technology: the non-essence underlying the statement of financial position.

4.1. The non-essence of the sign at the core of Saussure's semiology

Saussure's fundamental shift in theorising language can be characterised as a shift from substantive foundations – material and semantic – to relational ones. Signs are not pre-delimited objects, as the link between the sign's components – expression ('signifier') and content ('signified') – has no natural or purely rational anchors (*Course*, pp. 68, 78, 122; *Writings*, pp. 145-149, 238-239). This counterintuitive position about the non-substance of the sign (e.g., *Course*, pp. 113, 122; *Writings*, pp. 136-7) is consequential:

since all our distinctions, all our terminology, all the ways we express ourselves are modelled on this involuntary supposition of a substance, it must be accepted that the most essential task of a theory of language will be to unravel the initial distinctions (*Writings*, p. 136).

And further on:

The most finely balanced problem in linguistics is just what constitutes the existence of a given term, for no term comes to us as a clear-cut type of entity; only the illusion of habit gives us this impression (*Writings*, p. 163).

This indeed challenges the human habit and experience: “Language then has the strange, striking characteristic of not having entities that are perceptible at the outset and yet of not permitting us to doubt that they exist” (Course, p. 107).

As conceived by Saussure, the sign is in fact defined by being opposed to (physical and semantic) substance. Language and substance are mutually exclusive: “neither sounds nor ideas are linguistic objects” (*Writings*, p. 178). While disciplines like physics and chemistry investigate material substances, and disciplines like law or ethics contemplate on conceptual substances, semiology’s focus is on the non-substance of the sign. Semiology does not renounce the existence of substances, but only views them as beyond the scope of its investigation as a distinct discipline (*Writings*, pp. 26, 178). As further explained by Saussure:

linguistic facts cannot be composed only of one of these things [sounds and meanings], and at no time requires for its existence either one SUBSTANCE, OR TWO substances...which is our unavoidable starting point, and to which we must return (*Writings*, p. 168).³³

Instead of physical sounds or conceptual meanings, semiological systems are characterised by oppositions, differences, and generally relations. Semiology must be conceived in ‘negative’ – non-substantive – terms:

Langue [the language system] is ever on the move, pressed forward by its imposing machinery of negative categorisation, wholly free of

³³ The use of capital letters is in Saussure’s original manuscript.

materiality, and thus perfectly prepared to assimilate any idea that may join those that have preceded it (*Writings*, p. 51).

As Agamben (1993, p. 155) has acknowledged, the Saussurean theorisation of the linguistic fact as a “complex of eternally negative differences” (*Writings*, p. 153) has been transformative in language and more broadly in Western philosophy. With such theorisation, no single word possesses positive characteristics, but this is in fact a productive attribute: “because in discourse each [word] has an ongoing potential for communicational deployment...The potential is open-ended, conditioned solely by the availability of other words” (Harris, 2003, p. 241).

Barthes prescribed this non-substantive characterisation to language and language alone. He explains:

The absolutely differential value of the language is therefore probable only if we mean the articulated language; in the secondary systems (which derive from non-significant usages), the language is 'impure', so to speak: it does contain a differential element (that is, pure 'language') at the level of the variants, but also something positive, at the level of the supports (Barthes, 1968, p. 73).

However, the financial accounting sign shares this quality: its signifying function is not a secondary by-product of a different non-signifying function. As further discussed in the following sections, the accounting sign is also purely negative-differential; it is characterised by its non-substance.

4.2. *The necessity of an 'internal' theorisation of the sign's non-essence*

For Saussure, the fact that the sign has no substance also means that it should be treated as a distinct phenomenon. As Joubert (2006) puts it, Saussure's project can be characterised as the "radical desubstantialising" of language (p.

58), but one that at the same time brings out the power of language as a critical force, perhaps *the* critical force in society. Acknowledging the non-essence of language is indeed only “our unavoidable starting point” but “to which we must return” (*Writings*, p. 168).

In order to theorise the non-essence in social sign systems, Saussure offers a distinction between the signifying principles of language – ‘internal linguistics’, and its contingent social settings and impacts – ‘external linguistics’. This is only a methodological distinction, because these two spheres presuppose one another and are intertwined with one another (*Course*, pp. 8, 18, 20-23; *Writings*, p. 85). While external linguistics investigates the impacts of contingent cultural, political and institutional settings on the development of a specific language in a specific geographical area and a specific time period, internal study of linguistics – its semiological study – approaches language as a system that has its own arrangement (*Course*, p. 22), with a focus on its signifying power (*Writings*, p. 158).

Saussure highlights the fact that the social sign system operates in an environment of ever-changing circumstances, which include cultures, institutions and interests. The semiological system is so deeply historical, to the extent that “this thing cannot be suspended, even for 24 hours, and that each of its elements is re-edited thousands of times in this period” (*Writings*, p. 140); it is so deeply social, that the “community and its laws are among their internal, rather than external elements, as far as we are concerned” (*Writings*, p. 203). However, methodologically, semiology must be positioned in relation to, but without confusion with, other sciences that have a bearing on it, such as the social, psychological and logical sciences (*Writings*, pp. 185-186; *Course*, pp. 7, 22).

The study of the socio-historical settings of the sign system – accounting or language – must be complemented with a theorisation of its signifying procedures. The study of substances must be accompanied with the study of non-substance. The immanence of semiology should be understood in its boundaries: “one cannot therefore say too often that semiology can have its unity only at the level of forms, not contents” (Barthes, 1993, p. 114). Investigating the accounting technology as a sign system through semiology is not in contradiction to, but rather complements, the predominant social and historical studies of accounting. Or more generally:

the specific study of forms does not in any way contradict the necessary principles of totality and History. On the contrary: the more the system is specifically defined in its forms, the more amenable it is to historical criticism... Semiology, once its limits are settled, is not a metaphysical trap: it is a science among others, necessary but not sufficient (Barthes, 1993, p. 112).

4.3. *A non-substantive logic to accounting*

If accounting as social sign system has no substance, semiology may offer us a lens to study it as such. It offers a non-substantive framework – or logic – to the study of purposeful social sign systems.

The possibility and usefulness of framing accounting practices through a non-substantive logic have been recently introduced by Quattrone (2015a). In his earlier work, Quattrone (2009) had emphasised that a logic which “constrains, dominates, and thus forces users to do things its way” – that “drive and define” finite possibilities – cannot work in the practice of accounting (p. 104). There are always gaps in pre-designed logics, and these are appropriated by

users. In fact, Quattrone (2009) argued, such lack of substantive delimiting logics has been a pre-condition to the enduring success of accounting throughout the centuries and in diverse settings. This is the dual – ‘heteromogeneous’ – nature (Quattrone and Hopper, 2006) of an information technology such as accounting. It is heterogeneous in its substance and changing users (Saussure’s external linguistics), but homogeneous in its procedural schema (Saussure’s internal linguistics).

Quattrone’s more recent notion of procedural logic (2015a) enables the theorisation of the diverse practices not merely as complementary to, but rather as part of, accounting’s own logic. The procedural openness to changing substances is an immanent feature of the accounting technology. In developing this theoretical framework, Quattrone (2015a) builds on the late medieval rhetoric, and shows how spiritual and administrative accounting practices introduced by the Jesuit Order in the 16th and 17th centuries have been based on “procedural knowledge (the means, how) rather than substantial knowledge (the end, why)” (p. 13). Instead of presupposing stable external ordering principles (such as the good, the proper or even God), the Jesuit’s accounting’s procedural logic has been stemming from rhetorical practices of classification and segmentation, recombination and ordering, and finally – invention of knowledge.

The context of Quattrone’s (2015a) research has been administrative and organisational ordering and governance – in today’s terminology: ‘management accounting’. With semiology, the paper will offer a non-substantive logic in the context of contemporary financial accounting practices. The two theoretical frameworks – Quattrone’s mediaeval rhetoric and this paper’s semiology – are fundamentally in line with one another. As

argued by Roland Barthes, an advocate of Saussure's semiology and a scholar of the Jesuit rhetoric, rhetoric is a type of semiology (Barthes, 1968, 1994, 1997). Indeed, Quattrone (2009, p. 114) calls to take "a new vista on how accounting can be perceived for its semiotic power in organising and defining what counts as knowledge". The remaining sections of this paper propose to take this vista with respect to the balance sheet. They offer a non-substantive logic to IFRS asset recognition and measurement practices.

5. The non-substantive logic of asset recognition: reciprocal articulation

In discussing the issue of brand recognition, Power (1992, p. 61) illustrates the focus of critical accounting studies when it comes to financial accounting: "questions of asset identification and recognition which feature in 'conceptual' approaches to accounting policy ignore the variable social locations of actual technologies of identification and recognition". The focus of attention, argues Power, should be on institutional and political questions such as who is entrusted to measure and recognise assets rather than on abstract philosophical properties of recognition and measurement (p. 51). However, 'abstract' concepts and socio-historically situated practices are not mutually exclusive. These are in fact reconcilable if, and only if, the conceptual lens is situation-sensitive: when it is, in Quattrone's (2015a) terms, procedural rather than substantive. The current and the following sections offer, based on Saussure and Barthes' semiology, one such situation-sensitive conceptual lens to accounting recognition and measurement.

5.1. Beyond the insufficiency of representation: reciprocal articulation

Although the practical use of language as a mechanism to convey messages between individuals (*parole*) takes the notion of representation as necessary, reflecting a human habit, when evaluating the qualities of the language system as such (*langue*) it becomes clear that representation-correspondence is an insufficient explanation. In semiological systems, there are no readily defined objects, ideas or individual phenomena (*Writings*, pp. 5, 11; *Course*, pp. 65, 112). As discussed in the previous section – there are no pre-determined substances in social sign systems. Language is not a naming process, where we allegedly have “first the object, then the sign” (*Writings*, p. 162).

Importantly, from Saussure’s teaching and writings emerges an alternative conceptual foundation for the operation of the sign system, which might be best captured under the term *reciprocal articulation* (or reciprocal delimitation). The identity of a sign is a product of its delimitation from other signs in its surroundings (*Course*, pp. 22, 103; *Writings*, pp. 72-73), and, crucially, such delimitation is reciprocal, as it involves both the signifier-expression and the signified-content. This is most clearly demonstrated in the way that new words are introduced into or leave the language system. A new word comes to life through differentiation from existing, broader, ones: no word is completely new (*Writings*, p. 68). And if a certain word is lost, the remaining system will re-adjust its internal arrangement so that it would continue to account for all phenomena (*Writings*, p. 191).

The important point is that expression and content are delimited together, as both sides of a piece of paper (*Course*, pp. 113, 139). Ideas delimit forms and forms delimit ideas (*Writings*, p. 22), with no primacy of one over the other.

Articulation therefore is never technical or natural. In contemporary terminology – it is performative:

the characteristic role of language with respect to thought is not to create a material phonic means for expressing ideas but to serve as a link between thought and sound, under conditions that of necessity bring the reciprocal delimitations of units...the somewhat mysterious fact is that 'thought-sound' implies division, and that language works out its units while taking shape between two shapeless masses (*Course*, p. 112).

As Barthes explains (1968), under Saussure's original paradigm, the semantic process is not one of conjunction, composition or correlation between expression and content, but rather one of simultaneous 'carving out' of these two amorphous continuous masses of substance. It is as if in language "one cuts at the same time and at a single stroke into these two masses" (p. 56). Language unites these two levels "while simultaneously decomposing them" (*ibid*). Such articulation involves discretion (Barthes, 1997, pp. 52-53), as there is more than one way to articulate the two domains of expression and content, which are not related to one another through any natural or rational bond. Instead of a science of representation, Saussure concludes, "language might be called the domain of articulations" (*Course*, p. 112) and Barthes concurs: "language is the domain of articulations, and the meaning is above all a cutting-out of shapes" (1968, p. 57).³⁴

With semiology, the task "is far less to establish lexicons of objects than to rediscover the articulations which men impose on reality" (Barthes, 1968, p.

³⁴ The notion of articulation will take a central role in other intellectual frameworks, including in Deleuze and Guattari (2013[1980]), Barad (2003) and Latour (2013). However, in all of these theoretical frameworks the notion of articulation is extended beyond the scope of social sign systems (each of these is in fact a proposal for a metaphysics). These extensions do not require analysis here, as financial accounting falls within the narrower scope of semiology as discussed above.

57). The problematics of signifying is not so much in the inability to provide an exhaustive representation – it is not in the parts that are left 'outside of the picture'. It is rather in the immanent discretion that is involved in carving out the picture – which is always one out of many potential pictures.

5.2. Reciprocal articulation underlying IASB's asset recognition

Notwithstanding the fundamental role that representation, with variants such as 'faithful representation' and 'representational faithfulness', plays in the American and IFRS conceptual frameworks and beyond, critical accounting studies have recognised that a representational approach is insufficient also in theorising the logic of accounting. The alleged dichotomy between accounting expression (i.e., 'assets' in financial statements) and economic reality (economic resources) has been undermined by many, using various intellectual traditions.³⁵ Robson (1999, p. 621), for example, argued that: "The 'absence' of economic value undermines its claim to be the 'origin' of accounting 'representation'. Accounting's inter-relations with its purported economic foundations cannot be sustained in those terms". Another example is Chapman *et al.* (2009, p. 2), who argued that: "the objects upon which they [the calculative practices of accounting] act are the correlates and constructs of its practices, rather than something pre-existing or given".

However, the conclusion that the logic of representation cannot capture the practice of accounting recognition does not mean necessarily that there could

³⁵ See, for example Hines (1988, 1991), drawing on constructivist philosophy and anthropology; Belkaoui's (1978 and 1995) use of the Sapir-Whorf tradition in anthropology; Boland's (1989) use of Gadamer's and Rorty's hermeneutic tradition; Mouck's (2004) application of John Searle's theory of institutional reality; and Nørreklit *et al.*'s (2010) introduction of 'pragmatic constructivism' to accounting.

be no other logic to capture it. With semiology, this paper goes beyond the critique of heterodox accounting, and offers the logic of reciprocal articulation as the one underlying accounting recognition.

The explanatory power of the reciprocal articulation thesis is most clearly evidenced in intangible assets (but, as shall be illustrated below, is applicable to all main asset types). IAS 38 (IASB, 2004b) “requires an intangible asset to be identifiable to distinguish it from goodwill” (para. 11). The concept of ‘identifiability’ or ‘separability’ refers to the ability to delimit and separate an asset from a broader category – general goodwill, and it plays a crucial role in the recognition of intangible assets (Power, 1992; Napier and Power, 1992). According to the standard, an asset is identifiable if it is

separable, ie is capable of being separated or divided from the entity and sold, transferred, licensed, rented or exchanged, either individually or together with a related contract, identifiable asset or liability, regardless of whether the entity intends to do so (IAS 38.12(a)).

Separability becomes in fact the core locus of judgement in recognition, as the technical recognition thresholds of probability of future economic benefits and reliability of cost measurement are made redundant by IAS 38. Both of these threshold criteria are either considered *always* met – in the case of acquisition (IAS 38, paras. 25, 26, 33) or *never* met – in the case of internally generated assets (paras. 63-64). With these pre-defined assumptions, the judgment in the recognition of intangible assets is focused on the asset’s delimitation, in terms of the separate measurable economic benefit that derives from it (see Barker, 2015).

As in semiology, the articulation of the intangible asset from the general goodwill (or from the firm’s cash flow) is neither technical nor natural. There

is no one clearly-delimited resource that could be simply represented in the balance sheet. For example, an intangible asset may be separable “either individually or together with a related contract, identifiable asset or liability” (IAS 38.12(a)). There is more than one way to delimit an ‘asset’; more than one way to articulate a firm into distinct components. The delicate role that delimitation plays in accounting recognition is also highlighted in IFRS 3 (IASB, 2004c), in the context of business combination. Here, where the assets of an entire new business need to be accounted for individually, the role of delimitation is at the core of the recognition process (paras. 1, 5, Appendix A). The allocation of the firm’s cash flow to distinct ‘identifiable’ accounting entries – assets and liabilities – is judgment-based (paras. B32-34) and performative. It constitutes economic resources by delimiting their boundaries.

Crucially, this characterisation of accounting recognition as a judgment-based act of constituting separability – an act of reciprocal articulation – is not restricted to intangible assets. Underlying the focus of extant literature on such assets is the assumption – explicit or implicit (e.g., Power, 1992; Napier and Power, 1992; Sherman and Power, 1994; Barker, 2015) – that separability raises no issues with respect to physical assets. However, as analysed more systematically elsewhere (*Paper 2*), the recognition of all main asset types share this fundamental feature: the boundaries of all assets are plastic. IAS 16 (IASB, 2003a), for example, reflects the malleable separability of tangible assets, and specifically of their ‘unit of measure’:

This Standard does not prescribe the unit of measure for recognition, ie what constitutes an item of property, plant and equipment. Thus, judgment is required in applying the recognition criteria to an entity’s specific circumstances. It may be appropriate to aggregate individually

insignificant items, such as moulds, tools and dies, and to apply the criteria to the aggregate value (para. 9).

Physical or legal criteria cannot provide an external anchor according to which the firm's tangible assets are to be articulated. For example, land and buildings would frequently be considered inseparable for legal (ownership) purposes, but for recognition purposes, they are "accounted for separately, even when they are acquired together" (IAS 16.58). This is also the case of investment property under IAS 40 (IASB, 2003b), as sometimes "it is difficult to determine whether ancillary services are so significant that a property does not qualify as investment property" (para 13). A similar plasticity is found in IAS 41 (IASB, 2003c), applicable to biological assets, as the grouping of such assets may be done based on different attributes (para. 15).

The recognition rules proposed for minerals and oil and gas properties under IASB's Discussion Paper (2010) exhibit even more explicitly the principle of anchorless and plastic delimitation.³⁶ The boundaries of the geological resources are determined and re-determined throughout the life cycle of the exploration and production activities, based on various changing factors, such as geographical, geological, political, legal, economic and accounting factors. Aggregating and de-aggregating resources are paramount in the production of the mineral/oil asset or unit of account in the financial statement. Again, the thresholds of probability and reliability are assumed to be met (para. 3.33; see similarly in para. 3.15), and the focus of discretion is instead on the "range of

³⁶ The reference to the Discussion Paper is made in light of the lacuna in extant standards in treating the recognition of extractive industries assets. On the one hand, these assets are excluded from the recognition rules for tangible and intangible assets (IAS 16.3(c) and IAS 38.2(d), respectively), and on the other hand the existing IFRS 6 (IASB, 2004d) does not prescribe recognition principles.

possible geographical boundaries that could be applied to define the unit of account for mineral or oil and gas properties” (para. 3.44).

This logic of malleable articulation becomes more evident and generally applicable under the *CFED*. The first recognition criterion under *CFED* is ‘relevance’, and the first parameter for such ‘relevance’ is separability. An asset would not be recognised, “if it is uncertain whether an asset exists, or is separable from goodwill” (para. 5.13(a)) or “from the business as a whole” (para. 5.15). With respect to all main asset types, separability – as a manifestation of articulation – is at the core of recognition, and – as in semiology – it is anchorless. When it comes to financial statements, ‘existence’ has more to do with active reciprocal delimitation than with passive representation of allegedly pre-existing economic resources.

Furthermore, in line with the work of both Saussure and Barthes, the reciprocal articulation takes place on two different though interrelated levels: the system and the statement. The accounting community as a whole (through standard setters) articulates the conceptual system to distinct general categories, and the individual preparer articulates the specific firm/statement into distinct measurable resources/assets. The process of producing a financial statement is not merely about classifying phenomena into community-determined categories, but it also involves case-specific delimitation of the individual corporate entity. The performative intervention is of both the policy makers and individual practitioners in an iterative process that brings accounting assets into existence.

5.3. The power of reciprocal articulation

In semiology's conceptual shift from a logic of representation to a logic of reciprocal articulation, a new dimension of power is added to the 'productive force' of the 'accounting complex' (Miller and Power, 2013). Not only that the signified-concept (here: an economic resource) and the signifier-expression (here: an entry in a financial statement) are intimately united, they are also mutually constitutive as "each recalls the other" (*Course*, p. 66). Words are not signs that apply naturally to objects or ideas, but rather more "motors of ideas" (Saussure, unpublished notes, quoted in and translated by Joseph, 2012, p. 289). While the focus of representation is the discovery of an outcome, that of articulation is the generation of a process (Barthes, 1997, p. 52; also see Quattrone, 2015a, 2016a). As shown above, it is this reciprocal articulation that underlies accounting recognition for both tangible and intangible assets.

In conceptualising accounting's articulatory power, the distinction between the 'signified' and the 'referent' is crucial. The object expressed in a financial statement – e.g., a rentable shopping centre – is not the material referent but rather the conceptual signified; not the physical resource, but rather the economic phenomenon; not the building, but rather the rights to its potential economic benefits. The Baudrillard-inspired ontological argument that in contemporary culture accounting has lost its objective referent or that accounting signs now precede reality (e.g., Macintosh *et al.*, 2000; Bougen and Young, 2012) is of no necessity in a Saussurean discussion of accounting. Indeed, "we are very far here from wanting to engage in metaphysics" (*Writings*, p. 56).

This distinction becomes more explicit in the recent *CFED*: "Conceptually, the economic resource is the set of rights [arising from legal ownership] not the

physical object" (para. 4.12); and: "To illustrate the effect of this change in emphasis, the Discussion Paper suggested that, for a physical object...the economic resource is not the underlying object but a right (or a set of rights) to obtain the economic benefits generated by the physical object" (para. BC4.30). When these are the objects to be signified in financial statements – conceptual and not physical – one need not be a hyperrealist in order to acknowledge the constitutive power of accounting articulation with respect to all types of assets, tangible as well as intangible.

To summarise the Saussurean approach: language does not present substance; it presents actions of forces (*Writings*, p. 136). The two are intimately related in accounting as in language: the lack of substance is a precondition to the articulating force of accounting recognition.

6. The non-substantive logic of value measurement: value constellation

6.1. Beyond the insufficiency of intrinsic meaning: value constellation

The non-substantive character of semiological elements, such as assets in financial statements, is a source of complexity in sign systems (*Course*, p. 122; *Writings*, p. 163). Language is unique "for two reasons: (I) the internal void of signs; (II) our mental ability to grasp a term that is in itself nothing" (*Writings*, p. 74). This complexity is partly settled in its operative dimension through semiology's shift from 'meaning' to 'value': "a [semiological] form does not *have meaning* but *has value*: that is the crucial point. It *has value*, hence it implies the existence of other *values*" (*Writings*, p. 12). Value is the response to the lack of substance on both the expression and content levels:

Whichever viewpoint is adopted, *langue* is never made up of a collection of positive and absolute values, but of a collection of negative values or relative values whose existence depends wholly on the fact of their being opposed (*Writings*, p. 51).

Realising that the connection of the signifier to the signified "is mobile, precarious; nothing certifies it", Saussure "discovers value: now we can escape the impasse of signification: the relation to the signified (to gold) being uncertain, fragile, the whole system (of language, of currency) is stabilized by the behavior of the signifiers among themselves" (Barthes, 1994, p. 154). Semiology is thus reframed as a phenomenon dealing with "above all a *system of values*" (*Writings*, p. 203).

In specific terms, the semiological value is operationalised through two pragmatic relations. The associative relation is the one according to which elements in the sign system are grouped into categories. The value of an element is based on its similarity with, and difference from, other elements in the system. The second relation is the syntagmatic relation: a value is also derived from the interrelations of the semiological element with other elements in the broader utterance, the 'syntagm' (*Course*, p. 123; *Writings*, p. 39). A material figure assumes the capacity of a signifying form from the moment that it is situated within these two axes (*Writings*, p. 21).

Value is therefore not a product of intrinsic characteristics of the semiological element, but rather a product of relations with other values: differentiation from other values *in praesentia* on the syntagmatic axis, and interrelations with other values *in absentia* on the associative axis (*Writings*, p. 60; Barthes, 1968, pp. 58-9; Joseph, 2012, p. 597). It is merely "the center of constellation; it is the

point of convergence of an indefinite number of co-ordinated terms" (CLG, 126). This principle might be best captured in the term *value constellation*.³⁷

It must be noted, that the 'meaning' as a relation between signifier and signified is not completely abandoned, as we have both 'in-exchange' relations and 'comparison' relations (CLG, 115-116) which are "related in a way which defeats the mind" (*Writings*, p. 239). However, 'meaning' is untenable and insufficient in theorising the operation of social sign system, in light of the lack of natural or rational anchors for such a relation, as discussed above. From such insufficient substantive logic of 'meaning', Saussure shifts towards a pragmatic logic of a relational value constellation.

6.2. Value constellation underlying IASB's current value measurement

As elaborated in more detail elsewhere (*Paper 1*), the manifestation of semiology's logic of value constellation in accounting is illustrated firstly in the fundamental characterisation of fair value (FV) as a difference-based measurement. FV is anchored in prices of comparable assets in relevant markets, adjusted to reflect relevant differences. This is shown in the input hierarchy of IFRS 13 (IASB, 2011; paras. 72-90, B35-6). Level 1 inputs – prices of similar assets traded in active markets – are "unadjusted" evidence (paras.

³⁷ In his philosophy of information, Floridi (2008, 2009) shares some of semiology's principles discussed above. He depicts 'information objects' as neither substantial nor material (2009, p. 35), but rather clusters of differences in which malleability is inexhaustible (2008, p. 237). These objects combine relational data structures (Saussure's associative axis) and potential behaviour or interactions (Saussure's syntagmatic axis). However, for Floridi the focus is on the different levels of abstraction (or of granularity), which allow different informational objects to be observable. For Saussure, on the other hand, the multiple ways in which content and expression can be articulated are not an exclusive function of, and are not limited to, the level of abstraction/granularity.

76-77). In level 2 inputs, the measurement process starts with a market benchmark of similar assets (para. 82(a)), which is adjusted to account for factors specific to the measured asset, such as its location or physical condition (para. 83). A similar rationale of comparison and adjustment to both cash flows and discount rates applies where unobservable inputs must be used in level 3 inputs (see paras. 88, B18-19). The overarching principle of *FV* under the three input levels is therefore the differentiation principle of semiology's associative axis.

Second, the other axis of semiology's value constellation – the syntagmatic axis – is demonstrated in another dimension of IASB's current value measurement regime: the entity-specific value-in-use. The distinctive quality of value-in-use measurement is its sensitivity to the interrelation between the measured asset and other items (assets and liabilities) in the particular firm. This is shown in the 2011 amendment to IAS 36 (IASB, 2004a), which added a new paragraph (53A) that provided four factors to distinguish between a market assumption and an entity-specific assumption. The first two factors are “(a) additional value derived from the grouping of assets (such as the creation of a portfolio of investment properties in different locations); (b) synergies between the asset being measured and other assets” (IAS 36.53A). These are clearly effects of interrelations between the firm's specific resources. The last two factors are: “(c) legal rights or legal restrictions that are specific only to the current owner of the asset; and (d) tax benefits or tax burdens that are specific to the current owner of the asset” (*ibid*). Here again the focus is ultimately on the sensitivity to the interrelations between assets, as regulatory and tax aspects that are specific “only to the current owner” are impacted by the characteristics of the entity as a whole, with its other assets, and not merely by the characteristics of the individual asset *per se*. In semiology's terms, if market-based measurement

is a one-dimensional associative constellation of other values, entity-specific measurement is a two-dimensional constellation of values on both the associative and syntagmatic axes.

Third, the manifestation of semiology's value framework in accounting is also reflected in the relation between the (associative) market-based measurement and the (syntagmatic) entity-specific measurement. In semiology, value is comprised of complementary inputs: it is simultaneously a constellation of other values in the system (the associative axis) and in the statement (the syntagmatic axis). The *CFED* stands in contradiction to the above principle, as it envisions dichotomous outputs: purely market-based *FV* is contrasted with purely entity-specific value-in-use. However, a systematic analysis of IASB's publications shows (*Paper 1*), that its nuanced measurement prescriptions manifest semiology's model of complementary inputs rather than the *CFED*'s vision of contradictory outputs. This is briefly illustrated in the following paragraphs.

Under IFRS valuation techniques and assumptions for non-financial assets, the market-based considerations and the entity-specific aspects frequently co-exist. For example, under the application guidance of IFRS 13, exclusive market valuation is not appropriate "to measure the fair value of tangible assets that are used in combination with other assets" (IFRS 13.B9). In the case of a "specialised non-financial assets that have a significant value when used together with other non-financial assets" (IFRS 13.BC78; IFRS 13.31(a)), IASB acknowledges that market price cannot fully capture the asset value, as there is a need to take into account also the interrelation between the measured asset and the other items. In such cases, IASB prescribes valuation techniques other than the market-based technique, i.e. the cost approach or the income

approach. It demands a *FV* measurement that is two-dimensional – combining both the market (associative axis) and the entity-specific (syntagmatic axis) – rather than one-dimensional market valuation.

The incorporation of an entity-specific dimension into the *FV* measurement is also illustrated in financial assets. This is demonstrated most clearly in the case of financial assets and liabilities with offsetting positions in counterparty credit risks (IFRS 13, paras. 48-51, 56). Here, the ‘portfolio exception’ allows the measuring of a group of assets and liabilities on a net exposure basis, if the entity manages these securities on such basis with respect to exposures to market risks or credit risks of particular counterparties (paras. 48, BC118-9). The specific positioning of the financial asset within the particular entity with its other financial assets and liabilities (its entire securities portfolio) has measurement consequences. The same financial asset would have different values when positioned in different entities. Though IASB does not ‘come clean’ with this explicitly (Bougen and Young, 2012), its measurement prescriptions implicitly reflect a relation of complementarity rather than contradiction between the market perspective and the entity-specific perspective, just as in the semiological value.

Lastly, as in semiology, the ‘in-exchange’ relation is not completely abandoned in the shift to the ‘co-systemic’ relation of value constellation. In addition to the *FV* and value-in-use bases, the *CFED* defines “cash-flow-based measurement techniques” (para. 6.5). More generally, the estimation of the future cash flow is the overarching theme of all current value measurements. However, the net present value remains an unreachable ideal, in light of risk and uncertainty embedded in any estimation of the amount and timing of future cash flows (IFRS 13.B15; and see: Barker and Schulte, 2017; Richard,

2015; Bougen and Young 2012). *FV* is dually characterised as based on both present facts – market prices (*CFED*, 6.21; IFRS 13.9) and on forward-looking estimations – those of future cash flows (*CFED*, 6.23; and see also in *CFED*, Appendix A and IFRS 13.B13). Future and present go hand in hand in accounting measurement (Huikku *et al.*, 2017, p. 77; Barker and Penman, 2016); the former can only be indirectly interrogated by the latter (see Quattrone, 2016a).

The logic of fair value under IFRS is therefore the logic of semiology's value constellation. The intrinsic ('in-exchange') value – the unknowable future cash flow to be derived from the item – cannot ultimately serve as a basis for measurement. Instead, the value of the measured item is merely a constellation of other values: other values in the market from which it is differentiated, and other values in the company (statement) with which it interrelates.

6.3. The plasticity of value constellation

In semiology's conceptual shift from a logic of 'meaning' or intrinsic value to a logic of value constellation, a new dimension of malleability is added to the non-essence of accounting constellation (Burchell *et al.*, 1985). The *accounting constellation*, as Miller and Napier's (1993) *accounting ensemble* and Miller and Power's (2013) *accounting complex*, encompass various types of elements from different arenas, which include institutions and practices, discourses and norms. The ideas – or logics – composing these *constellations*, *ensembles* and *complexes* are drawn not only from the economic sphere, but also from the social and political realms. Such logics include, for example, that of the market efficiency (Miller and Power, 2013, p. 589), economic growth and the efficient functioning of the individual (Miller and Napier, 1993, pp. 641, 643), and the

industrial democracy (Burchell *et al.*, 1985). However, they are all substantive logics about the objectives of accounting (Quattrone, 2015a), whether economic, social or political. Semiology's *value constellation*, on the other hand, draws attention to the conceptual process of producing a statement – in this case a financial statement. The focus in these previous debates has been on the changing substantive themes inhabiting the context in which accounting operates, while this paper's focus is on procedural presuppositions that take part in allowing accounting to engage with – to be practiced within – such substantive realms (Quattrone, 2009, 2015a).

In addition to the interest in the “ensemble of meanings and significances” in accounting (Miller and Napier, 1993, p. 642), this paper proposes putting a spotlight on the ensemble that ‘significance’, in a financial statement, *is*. In addition to studying the network of “beliefs about value” (Miller and Power, 2013, p. 591), this paper proposes investigating the network that accounting value *is*. To the historical singularity of an event such as the value-added accounting (Miller and Napier, 1993, p. 642), this paper proposes to relate the semiological singularity of values within statements. Furthermore, to the rich sociological debate on the *use* of accounting numbers (e.g., Vollmer, 2007; Lorino *et al.*, 2017), the paper adds a focus on the epistemologically prior stage of the semiotic *production* of accounting numbers.

Semiology, in summary, highlights a procedural component in the plasticity of accounting (Mennicken and Power, 2015). The lack of extrinsic anchors for value constellations – the non-substantive character of the building blocks of the balance sheet – is a precondition to the malleability of accounting to social and institutional factors.

7. Conclusions

This paper has surfaced one particular aspect of accounting's non-essence: the non-essence underlying the IFRS balance sheet, as constituted through IASB's recognition and measurement prescriptions. There are no pre-determined economic resources to be included in the statement before the articulatory intervention of the accounting practices of both the standard setter and the statement preparers. There are no pre-existing intrinsic values but rather two-dimension relational values, the outcome of such intervention.

The lack of pre-determined semantic categories in language systems has been customarily framed through Saussure's principle of the sign's arbitrariness, which has also been applied to accounting (Tinker, 1991). However, the concept of arbitrariness, by itself, cannot fully account for the operation of social sign systems. The arbitrariness of the sign is restricted by the solidarity of the system as a whole. This is a crucial and often neglected aspect in Saussure's theory: "Reduction in any system of *langue* of absolute arbitrariness to relative arbitrariness; this is what makes up the 'system'" (*Writings*, p. 233). Hence, value may not be reduced to mere isolated and random oppositions with other values. To the principle of 'opposition' in value, Saussure adds the 'systematic solidarity' (*Course*, 132-133). Barthes has also stressed this necessity: "does not the sign's arbitrary nature constantly risk introducing Time, Death, Anarchy into language?" (1994, p. 155) and he answers: "In the Saussurian enterprise, value is the redeeming concept which permits saving language's permanence and surmounting what we call *fiduciary anxiety*" (*ibid*). While lacking substantive anchors, the accounting system – similar to the language system – is nevertheless not in a state of chaos. It has its procedural

scheme of two-dimensional value constellation – a product of reciprocal articulation – to maintain its operational solidarity.

This is where Saussure's methodological distinction between internal linguistics – investigated by semiology, and external linguistics – investigated by the social and natural sciences, becomes significant. The social sign system is situated within and is impacted by the heterogeneous environment, but in order to tackle its immanent problematics, one must also construct – methodologically – a homogenous sphere. Without such a methodological exercise, “the constitutive ambiguity of the language would reach an intolerable threshold” (Barthes, 1997, p. 52). In Quattrone and Hopper's (2006) terminology, this is the ‘heteromogeneous’ nature of information technologies. Acknowledging the various social factors involved in the practices of accounting recognition and measurement, the sections above highlighted the homogenous logic – ‘procedural logic’ (Quattrone, 2015a) – that is presupposed by the engagement with the heterogeneous environment.

When viewed from its objectives and consequences, as a “legal-economic hybrid”, the balance sheet lacks a unifying logic (Miller and Power, 2013, p. 573). It involves changing and sometimes contradicting themes, such as stewardship and decision-usefulness, control and calculation, managerial logics and market logics (*ibid*). However, when viewed from a semiotic perspective, as a social signifying technology, the balance sheet manifests the logic of reciprocal articulation and value constellation. These are offered here, to paraphrase the words of Robson (1991, p. 565), as a set of conceptual instruments or devices for the investigation and theorisation of the non-substance of the statement of financial position. These semiological principles do not require, and in fact refrain from, substantive ideas such as of market or

management, stewardship or control. The assumptions underlying the semiological principles are minimal: the statement is a social technology that is designed to signify multiple value-bearers that are related to one another as well as to other value-bearers in the relevant system. With these minimal but consequential assumptions, reciprocal articulation and value constellation comprise the non-substantive *logic* of the balance sheet as a *sign* technology – its *semio-logic*.

Drawing attention to this *semio-logic* of financial statements is not merely an intellectual exercise. A century ago, Saussure had called to study this logic as manifested in natural language as a matter of public interest. This is, in Barthes' words (1994, p. 8), the "ideological commitment of semiology", whereby "it is not enough to seek to change contents, [as] we must above all aim at *fissuring* the meaning-system itself". We cannot fully understand the contingency of language (the *parole*) without also understanding its distinctive characteristics as a sign system (the *langue*), as the two are supporting and presupposing one another. Similarly, we cannot fully account for accounting as social and political, without also unpacking the characteristics of its distinctive procedural operation (Quattrone, 2015a) that allow it to interact in a dynamic manner with its environment. Such semiological characteristics take part in facilitating the "accounting–society interpenetration" (Burchell *et al.*, 1985, p.385). The distinct problem of the sign is complementary – in fact, it is a pre-condition – to the problems of status and politics, interests and power, classes and social relations.

With its proposal of a non-substantive logic for the balance sheet, the paper demonstrates how accounting's power over its social surroundings is, partly, the power of articulating the unarticulated, and the non-essence of accounting

is, partly, the non-essence of its building blocks: value constellations. With semiology, the paper shows how the non-essence of financial accounting – as that of language – is the starting point to the understanding of its power.

CHAPTER V: CONCLUSIONS

1. The agenda of *Accounting Semiology*: towards critical studies of financial reporting

1.1. Relating a traditional domain with a critical approach through semiology's 'internal' perspective

On a general level, this thesis proposes a new disciplinary lens – semiology – in the investigation of the principles and assumptions underlying financial accounting. By this, it responds to recent calls from mainstream accounting scholars (e.g., Barth, 2015) for the expansion of the disciplinary resources in financial accounting research. It takes an initial step in complementing the traditional research with its almost exclusive reliance on economics, finance and psychology. The thesis also responds to recent calls from within the critical spectrum of accounting research to engage with the ‘nuts and bolts’ of the financial accounting infrastructure (Vargha, 2016; see also Robson *et al.*, 2017). It thereby also complements critical accounting studies, which, with their focus on socio-historical conditions and consequences, have paid less attention the financial accounting technologies themselves (Mennicken and Millo, 2017). The thesis therefore links the mainstream accounting domain with a critical interdisciplinary perspective.

However, the thesis does not remain at a general, abstract level. It shows how both branches of accounting research benefit from their interrelation with respect to concrete issues. By re-constructing two conceptual instruments from Saussure’s teaching and writings, namely value constellation and reciprocal articulation, the thesis problematises, and in fact reverses, fundamental

assumptions in financial accounting research and policy-making with respect to the core issues of asset measurement and recognition. Introducing the notion of value constellation, the thesis fractures the taken-for-granted market/entity contrast and locates such fracture in the IASB's own prescriptions, with implications both for the traditional *FV* debate and the critical debate of financialisation. Developing the notion of reciprocal articulation, the thesis relocates the crux of recognition to the seemingly marginal issue of separability and it re-characterises the judgment involved in recognition in a manner that complements the plasticity of valuation (Mennicken and Power, 2015) with the plasticity of the items to be valued in the first place. Finally, the combination of these two conceptual instruments allows to refine the argument about the non-essence of accounting by offering a logic – a semiotic-procedural logic (Quattrone, 2015a) – to one of society's most powerful signifying tools (Miller and Power, 2013): the balance sheet.

On both levels, the thesis uses semiology's 'internal' perspective. As elaborated in *Paper 3*, this 'internal perspective' is not to be understood as a perspective that is detached from socio-historical conditions, but rather as one that is a pre-condition to the interaction with ever-changing conditions. As Saussure emphasises, the distinction between internal linguistics and external linguistics is only methodological. In fact (and in contrast to what is usually argued against him in light of his association with structuralism), for Saussure the language is so deeply historical, that it "cannot be suspended, even for 24 hours, and that each of its elements is re-edited thousands of times in this period" (*Writings*, p. 140); sign systems are so deeply social, that the "community and its laws are among their internal, rather than external elements, as far as we are concerned" (*Writings*, p. 203). And as Barthes (1993, p. 112; 1994, p. 8) continues, semiology is attentive to the forms of the meaning-

making system, which interact with the ever-changing contents. Attention to the 'meaning-system' itself – to the accounting knowledge-production technology – is not in contradiction, but rather complementary, to a socio-historical investigation of the changing contexts of accounting.

Paying attention to the operational forms of the meaning-system – language or accounting technologies – is not a trivial choice in the contemporary academic and intellectual environment. As Barthes acknowledged half a century ago, viewing language as a system of values entails an immanent dimension, and "this immanence is inimical to sociological research" (1968, p. 24). This is still true today, and in that regard accounting research is no different from other scholarly domains. Levine's recent treatise *'Forms'* (2015) addresses precisely this deterrence in the realm of literary studies, which manifest remarkable similarities to accounting studies. Levine (2015) shows how the tendency of recent decades in literary and cultural research has been to stay away from issues of (literary) forms under the assumption that such issues are incompatible with historical, sociological and political sensitivity. But in fact, she shows how the formal and social are interrelated and inseparable: "there is no politics without form" (p. 3). Forms do political work in particular historical contexts, but certain characteristics of forms remain stable, and "attending to the affordances of form opens up *a generalized understanding of political power*" (Levine, 2015, p. 7). The study of the forms of literature – or in this case: of the accounting technology – does not stand in contrast with acknowledging the historical specificity of their use, when the form itself is situational (Levine, 2015, pp. 7, 11), or in Quattrone's terms (2015) – procedural. Levine asks to rethink the relation between literature and politics (2015, p. 16), a relation that is important and consequential: "I want to persuade those who are interested in politics to become formalists, so that we

can begin to intervene" (p. 23). This is, in fact, what semiology allows with respect to social signs systems in general, whether literature (which is a second-order linguistic semiology) or financial accounting (a financial-numerical semiology). This is the "ideological commitment of semiology" (Barthes, 1994, p. 8).

Semiology's 'internal' perspective in accounting studies should therefore be viewed as compatible with and complementary to the sociological perspective. In Agamben's (1999) terms, every reflection on a specific tradition must begin with – it presupposes – an acknowledgment of the transmissibility of language itself, of "the very unconcealment (*a-letheia*), the very opening in which something like a tradition is possible" (pp. 104, 105). Agamben's philosophical insight is with respect to the signifying capacity of the human language, but it applies also to another important signifying system, namely financial accounting.

1.2. Why semiology in financial accounting? The illustrative case of ANT

Throughout the previous chapters, this thesis has made the argument for the justifications and benefits of applying semiology in the specific context of financial reporting (see in particular the elaborated discussion in section 3 of the *Introduction* and sections 3 and 4 of *Paper 3*). This sub-section complements the above argument in hindsight of the three *Papers* and the specific accounting issues they discuss.

Some of semiology's themes have been taken up by later theoretical frameworks, which have expanded and used them in various social sciences. Some of these expanded notions, in turn, have been applied to accounting as a social phenomenon, not different from other social phenomena. An

important manifestation of the process of expanding some of semiology's principles and applying them to accounting is Actor-Network-Theory (ANT), which has been very influential in interdisciplinary accounting studies (for reviews, see Justesen and Mouritsen, 2011; Lukka and Vinnari, 2014; Modell *et al.*, 2017). As shown in detail by various intellectual-history studies, such as Hostaker (2005) and Beetz (2013), ANT has its theoretical foundations in semiology (and see also Czarniawska, 2014, pp. 113-115, under the title 'inspiration from semiology: actor-network theory'). ANT can therefore serve as an illustrative contrast in asking the question: why go back to the original semiology?

As explicitly and repeatedly acknowledged by Bruno Latour and John Law, the essence of ANT has been to a significant extent an expansion of semiology beyond the realm of language. Law states:

actor-network theory may be understood as a *semiotics of materiality*. It takes the semiotic insight, that of the relationality of entities, the notion that they are produced in relations, and applies this ruthlessly to all materials – and not simply to those that are linguistic (Law, 1999, pp. 3-4).

Law (2007) further suggests that “actor-network theory can also be understood as an empirical version of post-structuralism” (p. 6), which is anchored in “a semiotic relational logic” (p. 7). Latour describes this extension of semiology³⁸ in similar terms:

In the practice of ANT semiotics was extended to define a completely empty frame that enabled to follow any assemblage of heterogeneous

³⁸ Note that Law and Latour use the term 'semiotics' as synonym to 'semiology'. The more refined distinction between the two terms is frequently glossed-over outside the discourse of specialists. In English written work, the original French term – 'sémiologie' – is frequently translated to 'semiotics'.

entities – including now the ‘natural’ entities of science and the ‘material’ entities of technology. This is the second strand of ANT: it is a *method* to describe the development of associations like semiotics (Latour, 1996, p. 374).

Similar to Law, Latour summarises: ANT is about “extending semiotics to things instead of limiting it to meaning” (*ibid*, p. 375). In fact, as shown in detail in *Paper 3*, Saussure’s and Barthes’ semiology is far from being anchored in meaning (crucially, meaning is bypassed by the notion of value). But for the current purpose the point is that while semiology’s original boundaries are those of purposeful social sign systems, ANT’s scope spans well beyond it to natural and material realms.

However, with ANT’s all-encompassing goal, to account “for the very essence of societies and nature” (Latour, 1996, p. 369), the expansion of semiology “ruthlessly to all materials” (Law, 1999, p. 3) comes at the price of de-emphasising what is distinctive about sign systems. In his *Inquiry into Modes of Existence* (2013), Latour stresses that “It is precisely in order to give up the sign/thing distinction completely that I have chosen to speak of ‘mode of existence’” (p. 146), and that “multiplying the modes of existence implies draining language of its importance” (p. 234). The expansion of semiology is here correlated with a disinterest in the specificity of its original manifestation – language. Indeed, as Farias (2014) criticises, Latour’s ANT does not treat communication (which includes linguistics) as a distinctive realm but rather as “comparable to other things” (pp. 29-30).

ANT has been useful in investigating accounting – mostly management accounting – as a socio-material phenomenon similar to other socio-material phenomena. However, if the focus is on the distinctive characteristics of financial accounting as a system of representation (Llewellyn and Milne, 2007;

Miller and Power, 2013; Gallhofer *et al.*, 2015) or, in less loaded terminology – as a purposeful sign system, applying the original semiology may be more relevant. Instead of expanding semiology from words “ruthlessly to all materials”, the focus on financial reporting requires us ‘merely’ to move from signifying words to signifying numbers.

Furthermore, the contrast between the original scope of semiology and the expansion of ANT is enlightening with respect to the specific concepts underlying this thesis: reciprocal articulation and value constellation. The following paragraphs use such contrast between semiology and ANT (which is discussed here merely through Latour’s perspective) in order to enhance the argument for the relevance of semiology in the study of financial accounting. The following paragraphs are not aimed to provide a comprehensive comparison of Latour’s ANT and semiology with respect to these two concepts, but rather to illustrate the difference in their scope of applicability as far as it relates to financial accounting research.

1.2.1. Articulation in Latour’s ANT and in semiology

As elaborated in *Papers 2 and 3*, reciprocal articulation is one of the core procedural principles of Saussure’s semiology. Social signs systems operate not by passive expressions (e.g., ‘assets’ in financial statements) that represent pre-delimited concepts (e.g., economic resources), but rather by the reciprocal articulation (delimitation) of both expressions and concepts, from broader categories to finer and narrower ones. For both Saussure (*Course*, p. 112) and Barthes (1968, p. 57), “language is the domain of articulation”.

The notion of articulation is crucial also for Latour’s approach. In his recent treatise, *An Inquiry into Modes of Existences* (2013; hereafter *AIME*), which he

describes as a summary of his quarter of a century enquiry (p. xix), Latour argues:

[Articulation] is the ontological foundation of AIME; a being is articulated...It explains the principle "in the beginning was the Word" ("In principio erat Verbum") - we might say, rather, "in the beginning was articulation". Entities are not dumb, rather they are articulated; we do not speak because we have language but because we conspire with, and participate in, this generalized articulation.³⁹

And further on:

As this entire inquiry attests, deprived of other beings, any existent whatsoever would cease at once to exist. Its very existence, its substance, is defined by the supreme duty to explore through what other beings it must pass to subsist, to earn its subsistence. This is what I have called its **ARTICULATION** (Latour, 2013, p. 454).⁴⁰

In the context of the economic sphere, Latour (2013) uses the notion of delimitation – as Saussure and Barthes – as an alternative to representation, arguing that the object of the economic science is not the objective knowledge of ‘economic matter’ – knowledge of the referential type or of access to remote beings (p. 464-465). Instead, the calculations of the economic disciplines

have something better to do: they have to set *limits* to what would otherwise be *limitless* and *endless*; they have to offer instruments to those who must distribute means and ends. Let us say that they *format*, they put into form, they give form, they *perform* relations *starting from the raw material* of attachments, scripts and scruples. Here lies the whole importance, and even, if you will, the entire greatness, of these life forms (Latour, 2013, p. 465).

³⁹ AIME's online glossary, retrieved from www.modesofexistence.org on July 27, 2016.

⁴⁰ Capital bold letters in the original.

But different from semiology, Latour's articulation is pervasive to all 'modes of existence' and is not limited to language or sign systems (e.g., pp. 144-6). As quoted above, for Latour articulation is explicitly an ontological commitment. He further explains:

Now, as we are beginning to understand more clearly, it is *the world itself that is articulated*... Give existents back their ins and outs, what goes before and what comes after, and you will find that they are full of meaning, that they collect many differences besides that of the 'minimal pair' dear to advocates of structure, that they register the world's alterations admirably well... Why draw from this rich fabric made of multiple intersections only the lesson of the 'arbitrariness of signs'? Why remain so indifferent to the other differences? That the world is articulated and that this is why we sometimes manage to take up certain of its articulations through the intermediary of expressions... – is this not a more realistic, more economic, more elegant hypothesis... (Latour, 2013, pp. 256-7).

Indeed, different from Saussure's restriction to the epistemological realm of sign systems, Latour's articulation is ontological, pervasive and all-encompassing, with a goal of capturing all aspects of the physical, social and symbolic world.

These differences in the scope of applicability of 'articulation' have relevance for financial accounting research. For Latour, the emphasis is on the articulation of reality into the distinct levels or 'modes'. Saussure's focus, on the other hand, is the articulation of each of two levels – content and expression – separately ('horizontally'), i.e. the delimitation of different words in a language system, or of different numerical entries in an accounting statement. Latour's theory may shed light on the philosophical question of the relation between the economy and accounting, while semiology is most enlightening on the more pragmatic issue of how the accounting system and

accounting statements are being articulated into distinct accounting items, i.e. into recognised assets. In a sense, Latour's articulation is on a meta-level when compared to Saussure's articulation. The former mobilises the concept in a far broader context with a far more comprehensive ambition: "there is no use hiding the fact that the question of the modes of existence has to do with **METAPHYSICS**" (Latour, 2013, p. 19).⁴¹ On the other hand, Saussure – a linguist, not a philosopher – insists: "we are very far here from wanting to engage in metaphysics" (*Writings*, p. 56). This is precisely what makes his theory attractive in a conceptualisation of asset recognition in financial statements.

It should be emphasised, that the argument made here is not about the general supremacy of one framework over the other, but rather of their respective relevance in discussing different aspects of accounting as a multi-faceted research object. In the case of Huikku *et al.* (2017), for example, the authors use the ANT version of delimitation (articulation) to delimit "the object of impairment value" (p. 71). Delimitation here is the process whereby "the firm identify relevant traces that make the calculation possible" (*ibid*). With Saussure's more modest epistemological orientation, articulation is mobilised for the understanding of the delimitation of sign systems and sign statements into semiotic building blocks. In Saussure's original context these are words in the human language. In the context of this thesis the building blocks being delimited are the firm's assets that are to be presented on the balance sheet.

Indeed, Latour was not alone in expanding and elevating the concept of articulation. Other influential metaphysical treaties, such as those of Deleuze and Guattari (2013[1980]) and Karen Barad (2007), have taken a similar

⁴¹ Capital bold letters in the original.

approach in their account of the semantic, social and physical world. However, for the purpose of financial accounting, semiology's original articulation – within the boundaries of 'statements' and with no ontological or metaphysical presumptions – is applicable and insightful. As *Papers 2* and *3* show in detail, semiology's reciprocal articulation is most useful in challenging contemporary conventions about the limits – or more precisely: the delimitation – of the balance sheet's assets, and thereby in explicating the judgment and power involved in asset recognition.

1.2.2. Value constellation in Latour's ANT and in semiology

Latour's expansion of semiology well beyond its original realm of sign statements is manifested also with respect to the second core concept of this thesis: value constellation. As discussed in *Papers 1* and *3*, one of Saussure's principal achievements in theorising language is the shift from the notion of 'meaning', anchored in some intrinsic natural or rational roots, to the notion of relational 'value', which is merely a product of other values. Saussure notes that a form "does not have meaning but has value: that is the crucial point. It has value, hence it implies the existence of other values" (*Writings*, p. 12). The *Papers* have also emphasised the two dimensions of Saussure's relationality: each value is a constellation of other values in the system (being differentiated) and of other values in the statement (being interrelated). These are the associative axis and syntagmatic axes – the *in absentia* and *in praesentia* dimensions (*Writings*, p. 60) – of the value constellation. These are the two dimensions that charge a material figure with a signifying capacity (*Writings*, p. 21).

The fundamental shift from intrinsic ‘vertical’ theorisation to relational ‘horizontal’ understanding of language has been taken up and expanded by many of the leading social science theoreticians of the 20th and 21st centuries, such as Foucault in his archaeology of knowledge (2002 [1969]). Latour is no different in that regard. The focus on ‘horizontal’ (or ‘flat’) relationality is at the core of ANT, as illustrated in notions such as ‘Being-as-Other’ which is contrasted with substantive ‘Being-as-Being’ (Latour, 2013, p. 162 and *in passim*; and see the quotes made earlier in this section 1.2).

More specifically, Latour follows semiology’s specific model of two-dimensional relationality in order to expand it beyond the boundaries of social sign systems (see, e.g., Czarniawska, 2014, p. 113). In a series of papers from the early 1990s, Latour puts this model at the core of his science and technology studies. For him, the associative and syntagmatic axes (renamed by him, as explained below) provide nothing less than “a set of concepts that could replace the technology/society divide” and that “might help to rephrase some of the traditional questions of social order and especially that of the durability of domination of power” (Latour, 1990, p. 103).

As in the case of articulation, the two-dimensional value model is expanded by Latour. For that purpose, he first redefines the term ‘statement’:

By statement we mean anything that is thrown, sent, or delegated by an enunciator. The meaning of the statement can thus vary along the way, and it does so as a function of the load imposed by the enunciator. Sometimes it refers to a word, sometimes to a sentence, sometimes to an object, sometimes to an apparatus, and sometimes to an institution. In our example, the statement can refer to a sentence uttered by the hotel manager – but it also refers to a material apparatus which forces customers to leave their keys at the front desk. The word ‘statement’

therefore refers not to linguistics, but to the *gradient* that carries us from words to things and from things to words (Latour, 1990, p. 106).

With such expansion of the 'statement', the model nevertheless remains structured around the two familiar axes with an explicit reference to its origins in linguistics, though these axes are now renamed:

We thus define two dimensions: association (akin to the linguist's syntagm) and substitution (or paradigm⁴² for the linguists). To simplify even further, we can think of these as the AND dimension, which is like latitude, and the OR dimension, which plays the role of longitude... The vertical dimension corresponds to the exploration of substitutions, and the horizontal dimension corresponds to the number of actors which have attached themselves to the innovation (*ibid*).

Latour keeps referring to the linguistic two-dimensional scheme (though without explicitly naming its author, Saussure) in a latter paper discussing technical artefacts:

Linguists claim that these two dimensions allow them to describe the system of any language. Of course, for the analysis of artifacts we do not have a structure, and the definition of a grammatically correct expression is meaningless. But if, by substitution, we mean the technical shifting to another matter, then the two dimensions become a powerful means of describing the dynamic of an artifact. The syntagmatic dimension becomes the AND dimension (how many elements are tied together), and the paradigmatic dimension becomes the OR dimension (how many translations are necessary in order to move through the AND dimension) (Latour, 1992, p. 171).

The two dimensional constellation is mobilised by Latour not in order to study linguistic or semiotic values but rather 'programmes of actions', such as in the context of technological innovation. This fundamental expansion of the

⁴² Saussure original term – 'associative' axis – has been frequently replaced in later generations by the phrase 'paradigmatic' axis.

associative/syntagmatic model continues to be crucial also in Latour's more recent work:

To use a linguistic metaphor, if the beings of reproduction define some kinds of syntagmas (lines of force for inert beings, lineages for the living), might we not say that the beings of metamorphosis define *paradigms*, possible series of transformations, vertiginous trances? We would then be sketching a matrix made of the crossings between horizontal lines – reproductions – and vertical lines – metamorphoses or substitutions. They would form the warp and the woof of which all the rest is woven. If, much later on, humans begin to speak, it is because they slip into these horizontal and vertical series that they could not have invented. If humans act and speak, it is because the worlds are already articulated in at least two ways: *they reproduce, they metamorphose* (Latour, 2013, p. 287).

Latour's theory involves an expansion through a metaphor of the semiological model and of its building blocks, which for him include the human and non-human, social relations and technical artefacts, linguistic and material objects. All these heterogeneous elements are combined into one chain. This expanded model has quite different explanatory objectives and ambitions than those of Saussure. The interest of the latter has been in 'statements' in their modest version. This contrast highlights the disciplinary choice of this thesis: its interest is also in the modest version of 'statements', though instead of language statements it investigates financial statements, with the building blocks being numerical items rather than words.

Furthermore, Latour's interest is in how statements are followed, which social and technological forces are required in order for them to be respected by 'listeners'; in order for domination to emerge and to be made durable. This interest in the 'fate of the statement' (Latour, 1990, p. 105) underlies his focus on imperative statements (e.g., Latour, 1992, p. 157). Only under such exclusive focus on imperative statements can Latour re-define statements as

programmes of actions (Latour, 1990, p. 107). Semiology's focus is different: it is on the earlier primordial stage of producing the statement – even 'merely' a constative statement – and not in the actions that may or may not follow its enunciation. Again, the complementarity of semiology and ANT is surfaced: ANT provides a framework for the study of behaviour following imperative 'statements' (very broadly defined); semiology provides a framework for the study of the production of constative or imperative statements (conventionally defined). It is the latter aspect that is less investigated in critical accounting studies, and which is the subject-matter of this thesis.

To summarise: when the object of enquiry is financial accounting principles, such as asset recognition and measurement, which constitute the foundation of financial statements, the necessary expansion of Saussure's model is minimal. In this specific realm, instead of an ontological move from the semiotics of words to the semiotics of materials (e.g., Latour, 1996, p. 374), it suffices to have an epistemological move from the semiotics of words to the semiotics of numbers. Such a move retains the conventional definition of 'statement' and can benefit from the concepts of reciprocal articulation and value constellation in their primary form, with no metaphorical analogies. It does not require an expansion from statements to technologies (Latour, 1990), and not even from statements to narratives (Greimas, 1983); it requires merely the shift from a language statement to a financial statement.

One of Saussure's still quoted phrases (e.g., Daylight, 2017) is that "semiology will have much to accomplish if it does nothing else but discover its own boundaries" (Saussure, 1957, p. 19, also quoted in Benveniste, 1981, p. 5). The realm of financial accounting principles is perhaps the one single realm, other than that of the human language and its derivatives, which would naturally

fit these boundaries in their original form. This thesis shows how such meaningful fit with semiology's carefully delineated framework produces concrete benefits for financial accounting research and policy-making. These benefits will be summarised in the next section.

2. Contributions

The *Introduction* chapter of this thesis as well as the preceding section of this *Conclusions* chapter have shown the justification for and general potential of advancing a financial-numeric semiology. However, a general fit between a method (semiology) and a domain (financial accounting) is not enough. The proof of the pudding must be in the eating: what specific contributions to specific accounting issues are gained by advancing an *Accounting Semiology*? These contributions have been articulated in the three *Papers* that comprise the core of the thesis. They are summarised in sections 2.1-2.4 below, and are followed by a brief discussion (in section 2.5) of this thesis' contribution to semiology.

2.1. Asset measurement: the complementary market and entity perspectives

In light of the *CFED*'s attempt to conceptualise the issue of asset measurement, *Paper 1* challenges some of measurement's taken-for-granted assumptions, specifically with respect to *FV*. The *Paper*'s analysis employs the notion of value constellation, where the value of each item in a statement is derived from a constellation of other values-bearers in the general system (Saussure's associative axis) and other values in the specific statement (the syntagmatic axis).

2.1.1. Re-drawing the market-based/entity-specific dividing line

The first contribution of *Paper 1* is in redefining the attribute that distinguishes entity-specific from market-based measurement. Mainstream accounting researchers have characterised the difference between these measurement perspectives in epistemological and temporal categories. Market-based measurement has been conceived as anchored in present objective facts, while entity-specific measurement has been depicted as a subjective forward-looking measurement that is rather based on intentions and estimations (e.g., Barth and Landsman, 1995; Barth, 2006; Leisenring *et al.*, 2012; Hodder *et al.*, 2013; Whittington, 2015b). This contrast has been rightfully challenged, with the argument that all measurements involve both factual indicators and subjective judgment regarding the future (e.g., Huikku *et al.*, 2017; Barker and Penman, 2016).

With semiology as a framework, *Paper 1* demonstrates how the above untenable contrast must be replaced with a different – more realistic and less loaded – distinction. The ultimate difference between these perspectives is the value sensitivity to the interrelation between the firm's resources, or in semiological terms: the sensitivity to the syntagmatic axis. A market-based measurement is a one-dimensional constellation, occurring only on the associative axis (the level of the system – the market). An entity-specific measurement is a two-dimensional constellation, a product of both the associative and the syntagmatic axes.

2.1.2. FV as both market-based and entity-specific

The second (and ultimate) contribution of *Paper 1* is its problematisation of one of the most fundamental assumptions in both traditional and critical research

as well as in policy-making of financial accounting measurement: the principle that *FV* is a purely market-based value and not an entity-specific value (*CFED*, chapter 6; IFRS 13.2). In its analysis, the *Paper* shows how *FV* is frequently, for financial and non-financial assets, *both* market-based and entity-specific. The alleged dichotomy of the two measurement concepts is replaced with complementarity. In semiological terms: *FV* is a two-dimensional constellation, which cannot be reduced to one-dimensional market prices.

By fracturing the market/entity dichotomy, the *Paper* not only challenges a core principle in mainstream accounting research (e.g., Penman, 2007; Laux and Leuz, 2009; Whittington, 2015a, b). It also contributes to critical accounting studies, in two aspects. First, while critical research has frequently portrayed the increasing domination of financialisation (e.g., Power 2010, 2012; Müller, 2014, Zhang and Andrew, 2014), the *Paper* has surfaced the inherent limits of financialisation. Second, the *Paper* reconciles and generalises a few recent studies that have begun to show the unsustainability of the strict dichotomy between the market and the entity-specific perspectives (Huikku *et al.*, 2017; Barker and Schulte, 2017). Different from such studies, the *Paper* locates the destabilisation of the market/entity-specific dichotomy in the IASB's own prescriptions (in that regard, the *Paper* is more in line with Mennicken and Millo, 2017, though their study is in the specific context of impairment, while the *Paper's* analysis is of *FV* measurement *per se*).

By characterising the accounting value as a semiological value, the *Paper* explicates an under-noticed dimension of valuation: the syntagmatic dimension resulting from the irreducible interrelation between value-bearers in the broader value category – the financial statement. As the *Paper* emphasises, this judgment-based syntagmatic limitation to the financialisation

of *FV* is not contingent upon the market conditions and their calculative power (a power which continuously increases with the capabilities of data science), but rather a reflection of the inherent indeterminacy of value.

2.1.3. *Broader implications: refining relationality in valuation practices*

The third contribution of *Paper 1* is for the broader studies of valuation and calculative practices (e.g., Stark, 2009; Lamont, 2012), and their investigation of the situatedness of values. Such studies – in the context of accounting (e.g., Lorino *et al.*, 2017; Sjögren *et al.*, 2017) and beyond (e.g., Beckert and Musselin, 2013; Prato and Stark, 2017) have put emphasis on comparability, classification, distinction and differentiation, i.e., on the relationality of the associative axis. *Paper 1*, on the other hand, puts emphasis on the complementary dimension: the syntagmatic sensitivity to the relation with other value-bearers in the broader value category, a sensitivity which persists even in the extreme case of *FV*. The broader value category in this case is the financial statement (and its summary figures, such as total assets or net income), but in other contexts there are other broader value categories. Such is the case in art valuation, where the entire oeuvre of an artist has syntagmatic implications for the valuation of each item. *Paper 1* refines therefore the nature of relationality and situatedness of valuation practices by (re-) introducing Saussure's two-dimensional value scheme.

This refinement of the 'value situation' has an intellectual-history aspect. Many of the works in emerging valuation studies have been anchored in the turn-of-the-centuries pragmatism, introduced by the American semiotician C.S. Peirce and developed by John Dewey (see, e.g., the explicit references in Stark, 2009; Muniesa, 2011; Kornberger *et al.*, 2015). This thesis expands the

theoretical basis of current valuation debates by using Peirce's contemporary 'competing' thinker. Indeed, Peirce and Saussure are considered the forefathers of the predominant modern sign theories – American semiotics and Continental semiology (e.g., Daylight, 2017) – and both have much to offer to the understanding of value.

2.2. Asset recognition: re-characterising the judgment of recognition

While *Paper 1* challenges the assumptions regarding measurement, *Paper 2* challenges the assumptions about the constitution of what is to be measured: the recognised asset. This is done through the concept of reciprocal articulation, which is offered as an alternative theorisation of the operation of social sign systems, instead of the concept of representation that has been shown to be insufficient in previous literature. The 'signifieds' – e.g. economic resources – and the 'signifiers' – e.g. assets shown in the balance sheet – are mutually constituted by judgment-based articulation (delimitation) of the resource/asset from its broader category.

2.2.1. Separability as the crux of recognition and the plasticity of all assets

The first contribution of *Paper 2* is the positioning and characterisation of asset separability at the core of recognition for all asset types. The issue of asset separability has been ignored in the IASB's current framework (2010 [1989]), and its introduction in the new *CFED* has been seemingly marginal – inapplicable to the "vast majority of assets" (para. BC5.31). However, the *Paper's* analysis shows that separability is in fact at the core of the recognition procedures prescribed by the IASB throughout its standards and guidance. The existing formal recognition criteria – probability of future economic benefits and reliable measurement – have shown to become mostly

declaratory and redundant, while the judgment actually required in recognition is the separability of the asset from the firm as a whole (and its general cash flow). As in semiology's reciprocal articulation, the construction of the accounting entities (e.g., assets) is a product of delimitation, which is not pre-determined by technical or natural attributes; by physical or legal criteria. In accounting recognition, separability is therefore both crucial and indeterminate.

The *Paper* not only shifts away from the traditional theorisation of asset recognition, but extends critical studies on the issue. Such studies have pointed to the importance of separability, its indeterminacy and the judgment involved in the construction of assets, however with an exclusive focus on intangible assets (e.g., Power, 1992; Napier and Power, 1992). The (intuitive) assumption underlying these and other studies (e.g., Sherman and Power, 1994; Barker, 2015) has been, explicitly or implicitly, that separability and the flexibility it entails are of no relevance to tangible assets, which have clear physical boundaries (Llewelyn and Milne, 2007). By employing semiology, *Paper 2* shows the dominant role of separability and its malleable nature with respect to all asset types, including tangible asset. With semiology's distinction between the conceptual signified and the physical referent and with its overarching principle of reciprocal articulation, the *Paper* defuses the tangible/intangible dichotomy. It brings to surface the plasticity of asset recognition in general, which must be added (in fact: preceded) to the more familiar plasticity of asset measurement (Mennicken and Power, 2015).

2.2.2. Re-defining the judgment of recognition and its role in the production of financial statements

The second contribution of *Paper 2* is its re-characterisation of the judgment involved in asset recognition and its explication of the importance of such judgment in the overall process of producing the balance sheet.

Whether the focus has been on the formal recognition thresholds (probability and reliability) or in previous accounts of ‘existence uncertainty’ (Whittington, 2008; Barker and Penman, 2016), recognition has been traditionally conceived as a Yes/No question, i.e. to recognise or not to recognise an asset. With its semiological shift from a theorisation of passive representation to that of reciprocal articulation, *Paper 2* shows how judgment in the context of recognition is not restricted to a binary decision, but is rather located on a continuous spectrum. The IASB’s prescriptions suggest that the starting point of recognition is not the stand-alone resource, but rather the total firm’s cash flow. As in semiology, it is not that we have “first the object, then the sign” (*Writings*, p. 162). Accounting, as language, progresses not merely by composition but firstly by de-composition, ‘carving out’ (*Writings*, p. 11; Barthes, 1968, p. 56) – by separability.

While there is vast research on the judgment involved in measurement, *Paper 2* explicates the broad judgment in defining the boundaries of the item to be measured in the first place, boundaries which are not determined by extra-accounting factors. The scope of judgment in producing the balance sheet is therefore multiplied.

2.2.3. *Two dimensions of articulation: standard setters and standard users*

The third contribution of *Paper 2* is its explication of two distinct, though interrelated, dimensions of articulation: on the system level and on the statement level. Previous literature has focused on classification and ordering that are at the core of accounting systems, emphasising the discretion involved in never-natural categorisations (e.g., Grojer, 2001; Young and Williams, 2010; Mennicken and Miller, 2012). However, in addition to this system-level categorisation (e.g., Hatherly *et al.*, 2008) or general taxonomy (Rowbottom *et al.*, 2016), *Paper 2* theorises the articulation at the statement level – and the power of the statement preparer in constituting the resources of the firm by delimiting its general cash flow. As it is emphasised in semiology, there are no pre-defined general categories that the speaker merely aims at: it is rather the individual use that constitutes and re-adjusts the general categories on a continuous fashion.

The *Paper* therefore refines the performativity of accounting categorisation: naming things – systematically and institutionally – brings them into being (e.g., Sherman and Power, 1994, p. 480), but so does the individual articulation of specific statement. Both the categorisation by standard setters and the segmentation by standard users lack natural and rational anchors, and both are at the core of the constitutive power of accounting articulation. In an iterative complementary manner, they both bring accounting assets into existence.

2.3. The semio-logic of financial accounting

Paper 3 is a conceptual paper that contributes to accounting research by adding to the debate on the non-essence of accounting, and proposing a non-essentialist logic for the balance sheet.

2.3.1. *Accounting Semiology: a meaningful disciplinary delineation to financial reporting*

The first contribution of *Paper 3* is in offering semiology – as introduced by Saussure and Barthes – as a productive and critical disciplinary lens in the study of financial accounting principles. Previous studies, such as Quattrone (2000) and Gallhofer *et al.* (2015), have emphasised the need for a broader knowledge framework through which accounting could be investigated. These studies have also stressed the need for the broader framework to be critical and attentive to the social contexts in which accounting operates. *Paper 3* shows how semiology provides such a meaningful and critical delineation (Gallhofer *et al.*, 2015) of one branch of accounting: financial accounting principles underlying the construction of the balance sheet. The *Paper* demonstrates how semiology is a broad enough lens – but not too broad – to allow the theorisation of accounting as a distinct social phenomenon: a purposeful social signifying technology operating through statements comprising multiple terms (value-bearers).

Paper 3 also contributes to extant literature that has been using Saussure's semiology – and semiotics more broadly – in accounting research. The *Paper* adds a more detailed and in-depth engagement with semiology than prior studies (e.g., Tinker, 1991; Macintosh, 2002, 2003; Macintosh *et al.* 2000), and it is the first analysis to build on Saussure's more recently discovered *Writings*.

Not less important, the *Paper* adds to the accounting literature by harnessing semiology in the study of the core numerical financial statements, while previous studies have mostly used semiology or semiotics in the study of the narrative or visual parts of corporate reporting (e.g., Malsch and Gendron, 2009; Breton, 2009; and Davison 2011a,b, 2015). Fundamentally, *Paper 3* offers a non-linguistic financial-numeric semiology: an *Accounting Semiology*.

2.3.2. *Theorising the non-essence of financial accounting*

The second contribution of *Paper 3* is to the debate on the non-essence of accounting. Previous studies have mostly taken a genealogical approach to show that accounting in general is not stable over time, but rather a contingent product (constellation, ensemble, assemblage etc.) of its socio-historical surroundings (Burchell *et al.*, 1985; Miller and Napier, 1993; Miller and Power, 2013). *Paper 3* adds to these studies by offering a discussion on the non-essence of one particular accounting technology – the balance sheet – from a semiotic-procedural perspective. By showing how semiology has set out to theorise precisely the issue of non-essence characterising social sign systems, *Paper 3* demonstrates the non-essence of the building blocks of the balance sheet, i.e. its assets constructed by recognition and measurement practices. Such building blocks are shown to be merely relational 'negative' (e.g., *Writings*, p. 51) value constellations, the product of anchorless reciprocal articulation.

With such theorisation, the *Paper* relates the non-essence of the balance sheet to its distinctive power as “perhaps the most powerful system of representation of social and economic life that exists today” (Miller and Power, 2013, p. 563). It shows that reciprocal articulation– accounting's power to articulate the firm and its cash flow – adds another layer to accounting's

‘productive force’ (Miller and Power, 2013). It further shows that the value constellation adds another layer to the malleability of the ‘accounting constellation’ (Burchell *et al.*, 1985). The semiological non-essentialist characterisation of financial accounting takes part therefore in the “accounting–society interpenetration” (Burchell *et al.*, 1985, p. 385), and serves as a precondition to the intervention of institutional and political power.

2.3.3. *The non-essentialist logic of the balance sheet*

The *Paper*’s third contribution is in its distinction between essence and logic in the context of financial accounting, and thereby in its offering of a non-essentialist logic to the balance sheet. Previous studies have argued that “there is no accounting logic as such, there is no accounting essence” (Miller and Power, 2013, p. 592), with reference to economic or legal logics (*ibid*, p. 573). *Paper 3* refines this argument in the context of the balance sheet: while its building blocks (i.e., assets) have no essence, the balance sheet itself does have a logic – a non-substantive procedural logic (Quattrone, 2015a). The inadequacy of the concepts of representation and natural values results not with abandoning the conceptualisation of accounting as a signifying technology altogether, but rather with an alternative non-representational framework. Such a logic is captured in the anchorless reciprocal articulation that produces relational value constellations. It maintains procedural solidarity of the system notwithstanding the lack of essence of its individual components. This is indeed not an economic or legal logic – or any other substantive logic – but rather a semiotic logic. The *Paper* draws on Quattrone’s (2015a) introduction of the notion of procedural logic, and applies it to a different context – financial accounting – while also embracing a different

(though not unrelated) analytical framework – semiology. In summary, it offers a *semio-logic* of the balance sheet.

2.4. General theoretical and methodological contributions: an interdisciplinary approach to financial accounting principles

Beyond the contributions to the specific issues discussed above, the thesis as a whole contributes to accounting research by offering a qualitative, interdisciplinary study of financial accounting procedures, which is rare in the literature (Huikku *et al.*, 2017, p. 79). It introduces a theoretical framework for the study of core financial accounting issues outside the disciplinary lenses of economics, finance and psychology, which dominate financial accounting research. It thus responds to recent calls for more disciplinary diversity by both the traditional (Barth, 2015) and critical (Robson *et al.*, 2017) spectrums of the accounting research community. In doing so, the thesis relates the critical approach with the mainstream accounting domain, with benefits to both camps.

The benefit of such uncommon intersection may be highlighted by contrasting it with the more common approach of expanding the boundaries of accounting (e.g., Napier, 2006, Robson *et al.*, 2017). The objective of social accounting, for example, has been defined as “the opening up of new spaces, of new accountings” between the conventional accounting literature and practice and the alternative critiques and theorising (Gray, 2002, p. 698). This thesis, on the other hand, shows the benefits of *closing* – or at least narrowing – the hiatus between these two domains and literatures. Put differently: this thesis is oriented not towards “accounts which go beyond the economic” (*ibid*, p. 687), such as environmental accounting or social responsibility accounting, but

rather towards accounting that goes beyond *economics*. It offers a novel disciplinary perspective on ‘old’ domains – the ‘good old’ or the ‘bad old’ financial accounting principles.

The thesis also makes a general methodological contribution. By focusing on the nuanced prescriptions of the standard setter, it addresses a consequential but relatively under-investigated dimension (Barker and McGeachin, 2015) of financial accounting practices. Going to the implicit concepts underlying the standard-setter’s prescriptions produces surprising insights with respect to some of the most fundamental assumptions in policy-making and research, such as the alleged identification of *FV* exclusively with the market perspective and the perceived marginalisation of separability in asset recognition. While previous interdisciplinary studies have highlighted gaps or translations (Cooper and Robson, 2006; Huikku *et al.*, 2017; Robson *et al.*, 2017) between standards and their implementation by preparers, this thesis positions the analysis on the gap within the standard-setter’s own realm: between IASB’s formally proclaimed concepts (such as in the *CFED*) and the nuanced recognition and measurement procedures it actually demands. It therefore highlights the fragility of the standard-setter’s own products, which might otherwise seem coherent.

This is illustrated in the recent study by Georgiou (2017), who identifies a dissonance in the characterisation of *FV* between standard setters and standard users (analysts). However, his focus is on users, while the depiction of the standard setters is very brief and based on secondary quotes from a small group of individual academics with standard setting experience. This results with a simplified version of the standard-setter’s perspective, as if *FV* is equivalent to an exclusive market-based valuation of standalone items with

no reference to the firm's performance as a whole. As this thesis has shown (in *Paper 1*), an analysis of the details of the IASB's actual prescriptions reveals a much more complex and sophisticated attitude precisely with respect to these important issues: it reveals that the value dissonance already exists within the sphere of the standard setter itself. Such a methodological sensitivity is important especially because standard setters often do not 'come clean' with their own principles when it comes to 'persistent troubling issues' (Bougen and Young, 2012, p. 391).

In attending to the nuances of the IASB's prescriptions, the thesis follows the recent studies by Barker (2015) and Barker and McGeachin (2015), but different from them it mobilises an interdisciplinary approach. Methodologically, the thesis takes part in filling the gap between two research trends: the interdisciplinary school that usually takes for granted the standard setter domain and brackets its 'nuts and bolts' (Vargha, 2016), and the more traditional school that investigates the complexities of the standards and guidance from within its restricted disciplinary boundaries. With its interdisciplinary analysis, the thesis shows how the problematisation of taken-for-granted assumptions is not restricted to the realm of standard users but is already present at the level of the standard setters.

2.5. Contributions to semiology

While this thesis' focus has been on the benefits of using semiology in financial accounting, a note is due with respect to the reverse contribution of accounting to semiology. In Richardson's (2012) terms, it is not the case that accounting is merely a 'consumer of theory', but it rather also 'contributes back'. Accounting contributes back to semiology first and foremost by instantiating and

materialising the gap between semiology and linguistics, and thus justifying the former as a distinct framework. By introducing a non-linguistic semiology, a financial-numerical semiology, the thesis breaks with a century-long association of semiology with language and its derivatives (such as myths, narratives etc.). With semiology as a parent discipline, accounting and language are on parity and not subjected to one another. With accounting, semiology is rising to an independent stance, separate and distinct from its primary bondage to language. As noted in section 3.2 of *Paper 3*, Roland Barthes was pessimistic about the future of Saussure's core semiology due to its alleged reduction to linguistics. He nevertheless saw a potential way forward:

“But above all, the extension of semiological research will probably lead to the study (which may eventually prove fruitless) of serial, and not only oppositional, paradigmatic relations” (1968, p. 80).

This thesis proposes such a serial, numerical semiology. Furthermore, with such distinct, numerical manifestation, an emphasis is put on two newly constructed (or at least newly titled) notions – reciprocal articulation and value constellation – as those that are at the core of the conceptual operation of semiological systems. The re-conceptualisation of financial accounting contributes therefore to the general theory of semiology.

Interestingly, both Saussure and Barthes briefly refer to monetary values as an illustration of a semiological value. Saussure gives the example of the in-comparison ‘horizontal’ relation between the Swiss Franc and the American Dollar, which is different from the in-exchange ‘vertical’ relation between any of the currencies and a loaf of bread that can be bought with it (*Course*, p. 115). Similarly, Barthes (1994) makes the analogy to monetary currencies and gold.

Those believing in Hermeneutics view the gold – the signified – as certifying the currency – the signifier. However, Barthes emphasises, "Saussure's little drama is that...he trusts neither the Sign nor Gold"; for him "currencies would stand among themselves, without reference to a natural standard" (p. 154). These analogies illustrate the semiological shift from intrinsic meaning to relational value, but only in a partial manner. Both Saussure and Barthes fail to fully follow their own principles, which require not only relationality, but – specifically and crucially – two-dimensional relationality, with the situatedness (syntagmatic axis) added to the classificatory system (associative axis). They both fail to move from linguistic semiology to financial semiology. In currency-exchange transactions there is only the system (market), and no particular 'statement': the syntagmatic axis is missing from this unsatisfactory analogy. Financial semiology is, instead, manifested in financial accounting, as evidenced throughout this thesis.

Another benefit of introducing *Accounting Semiology* is in instantiating another under-appreciated gap: that between semiology and structuralism. By this, the thesis takes part in the recent revival of the Saussurean legacy, which, as discussed in section 3.2 of the *Introduction*, is currently prompted by the discovery and publication of his *Writings*, shedding new light and emphasis on some of his fundamental and frequently misunderstood concepts. The thesis has therefore an intellectual history dimension.

More specifically, with financial accounting one is reminded of what is lost in the move from semiology to structuralism and then to post-structuralism. In expanding the scope of relationality from 'words to things', structuralism has abandoned the situational syntagmatic axis and remained with one-dimensional structured associations. In post-structuralism's response, we have

moved from one dimension to *thousand plateaus* (Deleuze and Guattari, 2013 [1980]) or to multiple *modes of existence* (Latour, 2013). However, in the appropriate context – the context of language or financial statements – one realises not only that a single dimension is not enough but also that multiple dimensions may be impracticable. In such limited but important contexts – in financial accounting as in language – Saussure's two-dimensional procedural scheme may be, if only methodologically, both enlightening and operable. *Accounting Semiology* therefore entails benefits for both accounting and semiology.

3. Limitations, further research and practical relevance

3.1. Limitations

Like other research, this thesis is shaped by research design decisions, such as with respect to the scope of investigation and the perspective taken. Such decisions inherently entail limitations, which are briefly addressed below.

The first limitation of this study arises from its focus on one, and only one, particular accounting tool: the statement of financial position. Other important – and to a certain extent complementary – statements, such as the income statement, have been excluded. This choice does not reflect taking a stand in the long and continuing debate as to the conceptual 'starting point' of financial reporting, i.e. the balance sheet approach *versus* the income statement approach. The choice of the balance sheet does reflect more practical and policy-oriented considerations. The underlying assumption of the IASB (as of the FASB) is arguably (though not explicitly) the balance sheet approach, where income is a derivative of changes in assets and liabilities (*CFED*, paras.

4.48, BC4.2-4.3; Dichev, 2017), and one of the thesis' core guiding principles has been a close engagement with the standard-setter's perspective. Such engagement allows for a realistic, 'internal' critique rather than an idealist, 'external' one, and consequently favoured having the balance sheet as the principal object of enquiry.

Furthermore, even within the boundaries of the balance sheet, the thesis has investigated only one dimension, namely assets, thus scoping out liabilities and equity. Again, this limitation has practical, methodological reasons. As the thesis aimed at a re-conceptualisation of recognition and measurement principles from an entirely novel perspective, the case of assets has been the most trivial one to begin with. Liabilities and equity, on the other hand, are frequently defined and conceptualised as derivatives of assets (see, e.g., the *CFED* paras. 4.5, 4.24, 4.43). Assets have therefore been the natural starting point for the proposed *Accounting Semiology*.

The thesis' analysis of asset measurement (in *Paper 1*) is further limited to fair value measurement, and leaves out historical cost. This choice is in line with Barth's (2008) advice: "framing the measurement debate in financial reporting as historical cost versus fair value misleads and obfuscates the issues" (p. 1166), as there are almost no cases in which current value is not relevant at some point in the life-cycle of an asset. Furthermore, as fair value is gaining ground, discussing its precise form is becoming more important than its traditional opposition to historical cost (Zijl & Whittington, 2006). The focus on current value measurement is therefore purposeful: as it has been shown, the friction in accounting measurement is found not only in the classical positioning of historical cost versus fair value; it is found also beneath the surface, within fair value measurement.

A fourth limitation in terms of the thesis' scope is the lack of engagement with issues of presentation and disclosure (chapter 7 in the *CFED*). Indeed, presentation and disclosure are sometimes viewed as the third principal dimension of financial accounting – complementing recognition and measurement. However, the issues of narrative disclosures are of less relevance to this thesis. As it has been explicitly stated throughout the thesis, the purpose of the thesis has been to harness semiology in the study of the core financial-numerical statements, and not the textual parts either in the notes or in other parts of corporate reports. As to the presentation issues that do not relate to the notes – such as issues of classification and aggregation – these are interrelated with recognition and measurement issues and have been addressed in the thesis to the extent deemed required (see for example the extensive discussion on the unit of account issue in *Paper 2*).

A fifth main limitation of this study is its perspective of analysis, which is restricted to that of the standard setter, and more specifically: IASB's perspective. The production of financial statements has been long acknowledged to be a complex process involving various stakeholders in various steps (e.g., Cooper and Robson, 2006) and the use of such statements is just as complex and consequential as their production (e.g., Robson *et al.*, 2017). This thesis has taken as its object of enquiry just one distinct 'slice' in this multi-faceted phenomenon. However, as discussed earlier in the thesis, this 'slice' is both under-investigated and extremely consequential (Barker and McGeachin, 2015). Especially in the era of the growing significance of the IASB worldwide, and the expansion in scope and detail of its standards and guidance, paying close attention to such perspective, with its nuances, complexities and inconsistencies, is justified. To the rich behavioural and

organisational research on standard users, semiology is well positioned to add insights regarding the standard-setter's perspective.

3.2. Further research

Some of the above limitations of this thesis could become stepping stones for further research. The exploratory nature of this research has made it necessary – intellectually and practically – to start with recognition and measurement of assets as reflected in the balance sheet. This is by no means the necessary end point of the proposed conceptualisation of financial statements. Further research could potentially explore, from a semiological perspective, other dimensions of the balance sheet – liabilities and equities – as well as other financial statements, such as the income statement and the cash flow statement. Such potential future research may build on the foundations of this thesis to contribute to a more comprehensive account of *Accounting Semiology*.

Furthermore, some of the specific issues investigated in the thesis may be complemented with the study of adjacent issues. For example, *Paper 2* has investigated the nature of recognition – of how accounting assets come into existence in the statement of financial position. A complementary issue of enquiry could be how accounting assets diminish or cease to exist, i.e. how they leave the statement. This would require a semiology-inspired analysis of issues such as de-recognition, impairment and depreciation. Semiology may provide a productive intellectual framework to challenge some of the taken-for-granted assumptions underlying these consequential accounting issues.

A third tier of extended research could be a study of standard setters other than the IASB. The obvious other accounting system is the American system, led by FASB. Such a system shares some of its fundamental assumptions with

the IASB, but is also different from it, for example by being more explicit in its reference to the socio-economic context (see sections 3.4.1 and 3.4.4 in the *Introduction*), and by being rule-based in contrast to IASB's principle-based regime. This could be particularly interesting, in light of the relatively recent structural changes in the FASB accounting system, introduced in the *Accounting Standards Codification* project. Another standard setter that may serve as an enlightening object of future research is the International Valuation Standards Council (IVSC), which is currently chaired by the previous IASB chairman, Sir David Tweedie. The IVSC develops valuation standards that are of relevance in and beyond the context of financial reporting. It may be of special relevance these days, as in the year 2017 the Council has finalised and published its new global valuation standards ('IVS 2017'), which are aimed to serve as a conceptual framework for valuation professionals around the globe. The similarities with, difference from, and interrelation with the measurement principles prescribed by the IASB (and the FASB) could generate various research questions, from a semiological perspective and beyond.

Another avenue for expansion is on the theoretical front, for example in relation to valuation studies (sometimes referred to as 'sociology of worth'). A dominant aspect of emerging debates in these fields has been the understanding that multiple incommensurable valuation registers are frequently applicable to the same phenomenon, resulting in value dissonance (Stark, 2009; and see its mobilisation in the context of *FV* measurement in Georgiou, 2017). However, the multiplicity of valuation principles in financial accounting produces an additional level of dissonance: different principles apply to different value-bearers that collectively comprise a broader value category. This is a fundamental aspect of financial reporting: the purpose of financial statements is to combine multiple individual value-bearers into

aggregates, such as total assets and net income. Such additional level of value categories leads to additional level of value dissonance, something that is not addressed in Stark's (2009) framework. Similarly, Boltanski and Thévenot's (2006) analysis distinguishes between two types of disputes: one is between different value-bearers ('beings') in a particular agreed order of worth (the distribution of states of worth); the other – between different incompatible orders of worth (what order of worth should apply to a certain situation). A financial statement exemplifies a situation which is not covered by these two options: it involves different orders of worth that are applicable to different value-bearers being part of a broader unit. Value dissonance is therefore intensified in financial accounting, which makes it a promising setting for further investigation of valuation practices.

3.3. Relevance for practice and potential impact

This thesis – in its research design, analysis and contributions – has been oriented not only to theoretical development but also to a close engagement with consequential policy-making issues. As discussed in previous sections, the thesis' perspective is that of the standard setter; its trigger is an important policy project which is still on-going – IASB's Conceptual Framework project; and its main objects of enquiry are two of the most fundamental accounting practices prescribed by accounting standard-setters: asset recognition and measurement. The conceptualisation of these two specific issues is of particular relevance today because, as discussed in *Paper 1* and *2*, the *CFED* makes an attempt to address measurement much more systematically and comprehensively than ever, and it substantially revises the recognition principles. These two issues are not only at the heart of financial accounting standards but are also cornerstones in the production and use of financial

statements by preparers and investors. Throughout its chapters – and in particularly in its first two *Papers* – the thesis is intrinsically policy-motivated as well as theory-driven. In fact, as described in section 2 of the *Introduction*, the distance kept in current research between conceptual development and mainstream policy-dominated issues has been one of the motivations for this project. The practical relevance of the thesis is therefore embedded, directly or indirectly, in most of its parts.

Furthermore, the relevance of the thesis for accounting practice is illustrated in more specific accounting issues, such as the business-model approach, which is an emerging issue that has been formally introduced for financial instruments (IFRS 9 from 2014) and is implicitly generalised in the *CFED* (and see the EFRAG 2013 report with a similar general emphasis). As discussed in *Paper 1* (section 6.2), the re-theorisation of fair value measurement through semiology defuses one of the main objections to the business-model approach, i.e., that it is based on subjective plans rather than present objective facts (Leisenring *et al.*, 2012). *Paper 1* has shown how business-model oriented measurement approach is not intent-based but 'merely' a situation-sensitive measurement. It has also shown how the underlying logic of the business-model approach should be explicated not only at the level of measurement selection criteria (as currently done in IFRS 9 and the *CFED*) but rather in *FV* measurement *per se*. Drawing the full consequences of the situation-sensitive business-model measurement would result in a more realistic portrayal of two-dimensional accounting values that cannot be reduced to one-dimensional market prices. More generally, it would enhance more entity-specific and less generic asset measurement.

The thesis' findings and analysis may also be of relevance to the persistent issue of mixed *versus* single measurement regimes. As briefly mentioned in section 2.2 of the *Introduction*, the meaningfulness of aggregate figures in financial statements, such as total assets, shareholders' equity and net income, has been questioned for decades, as such figures involve the adding up of differently measured items (e.g., Barth, 2014; for the opposite opinion see Ball and Brown, 1968, 2014). But in fact, a single measure regime – an exclusive market-based regime – would not solve the additivity issue if it did not take into account the interrelations between the entity's resources. What this thesis shows in *Paper 1*, is that at the core of a logically consistent measurement concept lies not a question of single or multiple measurement bases, but rather a broader question of the measure's sensitivity to the presence of other items in the statement. Barth (2014, p. 346) has recently acknowledged that

Although summing fair value amounts is amenable to aggregation, it does not result in an amount that represents the fair value of a group of nonfinancial assets because the sum ignores unrecognized assets and synergies among the assets. Thus, another key question is whether there is a measurement basis that possesses those characteristics both for individual items and for aggregate items, and, if there is, what is it?

This comment, coming from a prominent advocate of a single market-based measurement system, implicitly reflects the inherent conceptual limitation of financialisation in asset measurement. Market prices cannot capture the asset's accounting value where resources are uniquely interrelated. This is not a marginal issue – it is an unresolved problem at the heart of accounting measurement: the question of "how should the interrelations among these items be portrayed" is ranked high in Barth's list of "interesting, unresolved, potentially researchable questions" (2015, p. 505-6). Acknowledging the limits of the market perspective through a genuine business-model approach may

therefore also promote a more meaningful measurement regime, which cannot be offered by either the current mixed measurement approach or a single market-value (or *HC*) approach.

This issue may also benefit from this thesis' findings and theorisation of asset recognition. One of the main insights of *Paper 2* is the reversal of the starting point in the production of the balance sheet: there are no pre-given assets that are merely composed into a statement, but rather the statement – the firm – as a whole is firstly de-composed to contingently delimited assets. If indeed our starting point is the firm and our process is one of articulation, the question of interrelation between as-if independently existing recognised assets (Barth, 2015, p. 505-6) requires fundamentally different working assumptions.

4. Concluding remarks

Critical accounting studies have shown that accounting is doing much more than communicating financial information. Viewed through its consequences, accounting territorialises calculable spaces, it mediates actors and interests, it adjudicates the performance of individuals and it subjects individuals to unnoticeable control (Miller and Power, 2013). However, the understanding of these and other consequences cannot be complete without paying attention to a fundamental primordial aspect of accounting, which is frequently being simplified, by-passed and overlooked: accounting is a signifying technology. Its signifying capacity is a pre-condition – as well as a derivative – of accounting's social and political power.

The attentiveness to this complex reciprocal relation lies at the core of a century-old theory that has transformed the understating of another social signifying technology: the human language. Saussure's semiology keeps the

question of signifying 'on its toes' (Joubert, 2006, p. 50), highlighting the non-natural, non-neutral and non-passive aspects of the overlooked language. In semiology, the problem of signifying is an immanent problem that must be treated as complementing the contingent problems of status and politics, interests and power. This thesis has drawn insight from such semiological sensitivities in its investigation of the signifying capacity of financial accounting and its interaction with the social contexts it operates in.

This required taking a research approach that has not been common in either of the two main research schools, i.e. the capital-market research with its focus on accounting's implication in the realm of financial markets, and the critical research with its focus on accounting's implications in the organisational and institutional realms. It required looking into the standards, guidance, methods and techniques prescribed by the standard setter – into their 'nuts and bolts' (Vargha, 2016). It required taking the standard-setter's prescriptions seriously: with a close but critical engagement.

With such a theoretical framework and such a research approach, the thesis has offered a critique of fundamental accounting concepts. This has been done not by broadening the boundaries of accounting as it has been frequently done (Napier, 2006; Robson *et al.*, 2017), but rather by gaining a more refined understanding of two of its core issues: asset recognition and measurement. As the restraining effects of financial accounting's conventional 'source discipline', namely economics, are being more widely acknowledged even by traditional theorists (Barth, 2015; Jones and Wells, 2015), the need for novel – but still pragmatically relevant – lenses, such as semiology, becomes clear. This is especially the case when a major policy process, such as IASB's Conceptual Framework project, is underway.

Realising that the idealistic substantive assumptions of economics-based conceptualisations of accounting are both fragile and restrictive, need not result with disengagement from financial accounting concepts (Whittington, 2015a). It should instead encourage the development and mobilisation of less restrictive and more realistic analytical frameworks. Semiology offers such a framework – a non-representational, procedural (Quattrone, 2015a) framework. In fact, this is the distinct characteristic of semiology: its focus is not on the material or semantic substance but rather on the procedures of producing statements containing 'negative', substance-less, relational values (Joseph, 2016). Drawing the consequences of this fundamental shift in the theorisation of social sign systems is important today in the context of financial accounting as it has been a century ago in the context of the human language.

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